WEITRONIC PRODUCTS

WEITRONIC ENTERPRISE CO.,LTD.

Interconnect Products Edition A3 2013

Q-FLEX

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MOODY INTERNATIONAL CERTIFICATION

UKAS QUALITY MANAGEMENT 014

E201133

2.0mm Future Bus Connectors

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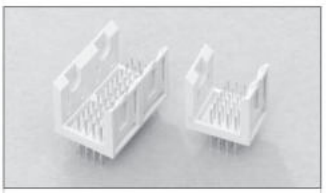

Male Signal Solder & Press Fit, Wide Body – 4 Rows
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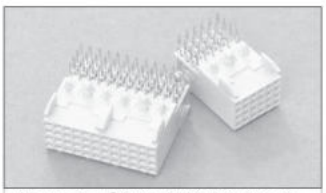

Female Signal Right Angle Solder & Press – Fit, Wide – 4 Rows
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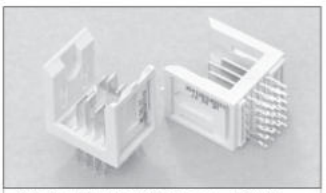

Male Power Press– Fit & Solder Pin, Wide Body – 4 Rows
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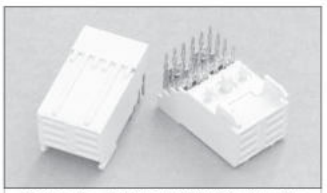

Female Power Right Angle Press – Fit Solder Type Wide Body – 4 Rows
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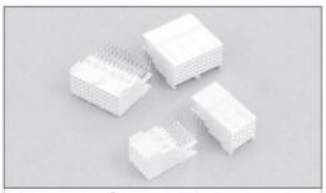

Female Signal Right Angle Solder& Press – Fit, Wide Body – 5 Rows
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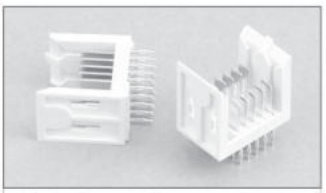

Male Power Press – Fit & Solder Pin, Wide Body – 5 Rows
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Female Power Right Angle Press – Fit, Wide Body – 5 Rows
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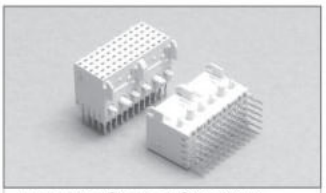

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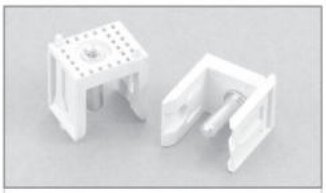

Male – 1 Row
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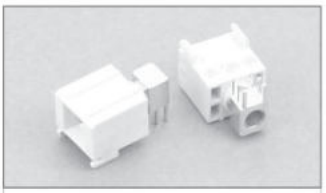

Female – 1 Row
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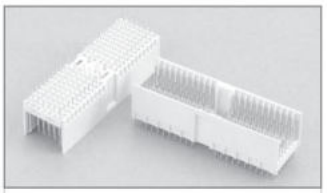

Vertical Male Type A Connectors for Fix Boards
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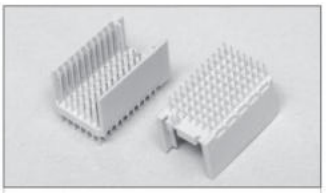

Vertical Male Type C Connectors for Fix Boards
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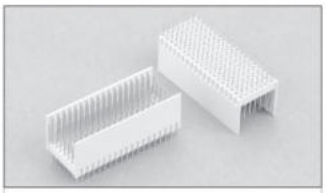

Vertical Male Type B Connectors for Fix Boards
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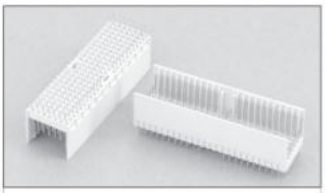

Vertical Male connectors Type AB for Fix Backplanes
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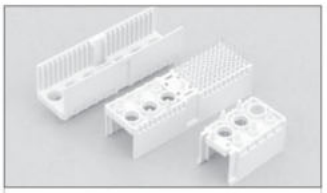

Vertical Male Type L/M/N Connectors for Fix Boards
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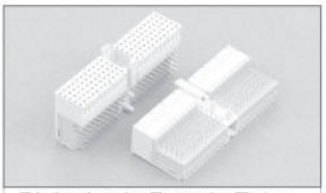

Right Angle Female Type A&C Connectors for Fix Boards
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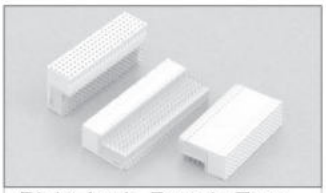

Right Angle Female Type B Connectors for Free Boards
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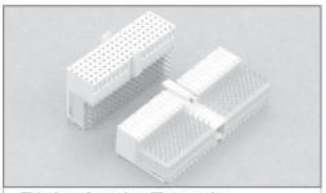

Right Angle Female Connectors Type AB for Daughter Cards
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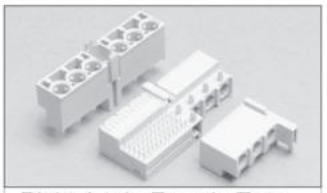

Right Angle Female Type L/M/N Connectors for Free Boards
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Vertical Female Power Modules for Backplanes
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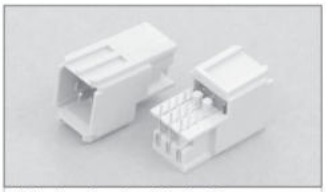

Right Angle Male Power Modules for Daughter Cards (3 Power Contacts)
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Shielding Covers
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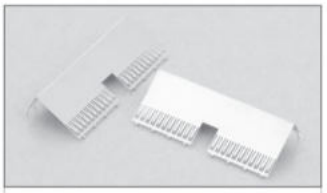

Shielding Covers
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Ordering Information

1688 P 60 M 10 S G I A P1 A

Series No.

Termination type
P=Press fit
S=Solder type

Number of contact
Power:1-Pin 8-Pins, 10-Pins
4Row: 24,48,96,192 Pins
5Row: 30,60,90,120,240 Pins

Connector type
M=Male
F=Female

Contact area plating
03=3 μ " Au
10=10 μ " Au
20=20 μ " Au
30=30 μ " Au

Tail
Tin
Tin
Tin
Tin

For male long tail version
(13.60mm,17.0mm)

Contact area
260=20 μ " Au
360=30 μ " Au
Tin plated or nickel plated in the middle

110=10 μ " Au
210=20 μ " Au
310=30 μ " Au
gold flash in the middle

Tail to mating
20 μ " Au
30 μ " Au

10 μ " Au
20 μ " Au
30 μ " Au

Connector Type
s=180 °
R=90 °

Pre-mation
For male only,
EG.a8 with extended pin 2E,the code no-AB 2E.
Omit for the standand connector

Location peg
Female
P1=3.0mm
R1=5.2mm
R2=6.0mm

Male
P2=2.5mm
For sloder type only.
Indicate "P" for male press fit type

Termination "D"
Female A=2.9mm
B=3.6mm
Male C=4.2mm
E=13.6mm
F=17.0mm

Color of insulator
I= White

Mating parts

Power

Code No.	Row a	Row b	Row c	Row d	Row e
D	6.5	6.5	6.5	6.5	6.5
H	6.5	7.25	6.5	6.5	6.5
K	6.5	8.0	6.5	6.5	6.5
M	7.25	7.25	7.25	7.25	7.25
N	8.0	8.0	8.0	8.0	8.0
I	14.5				
J	16.0				
X	As request				
O	Female version				

Signal unit: mm

Code No.	Row a	Row b	Row c	Row d	Row e
A	5.75	5.75	5.75	5.75	5.75
B	6.5	5.0	5.0	5.0	5.0
C	6.5	5.75	5.75	6.5	5.75
D	6.5	6.5	6.5	6.5	6.5
E	5.75	7.25	5.75	5.75	5.75
F	5.0	5.0	5.0	5.0	5.0
G	8.0	8.0	8.0	8.0	8.0
K	6.5	8.0	6.5	6.5	6.5
L	8.0	8.0	7.25	6.5	6.5
P	5.0	5.0	6.5	5.0	5.0
X	As request				
O	Female version				

UL Approval
RoHS Compliant

- Two-piece-connectors system designed in metric dimension on 2 millimeters grid over 5 rows
- Standardized product through EIA(USA). IEC and CECC (international).
- Selected by IEEE as the interconnection system for Futurebus + /SCI/VicBus.
- Multi-sources product,use for telecommunication,network,server/wokstation market.
- High tempersture materials SMT compatible.
- Modular design giving flexibility for system design.
- Stackable end to end without loss of contact position.
- High density(more than 2 times as compared to the standard inch based "Euroconnector DIN 41612").
- Tuning Ford female contact concept for higher robustness and improved reliability (low contact resistance and high normal force).
- Low insertion force design.
- Inverse connector system(signal and power).
- Optimized solder and compliant press-fit terminations for backplane and circuit board connectors.
- 5 differents mating lengths on signal and 3 on power for standard connector system.

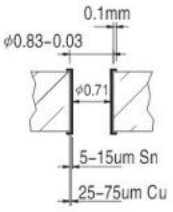
Technical data

1688 Series	Signal	Power
Housing	Liquid Crystal Polymer(LCP) UL 94V-0	
Contact	Male:Brass Female:Phosphor Bronze Press Fit Type:Phosphor Bronze	
Operating Temperature	-55 ℃ ~+125 ℃	
Contact Resistance	30m(ohm)min.	
Insulator Resistance	1000 Megohms Min.at DC 500V	
Current Rating	1 AMP	3 AMP
Withstanding Voltage	AC 500V for 1 minute	
Insertion Force	0.45 N max.per individual contact	1.5 N max.per individual contact
Withdrawal Force	0.2 N min.per individual contact	0.5 N min.per individual contact
Contact retention in housing	Female = 5N, Male = 10N	

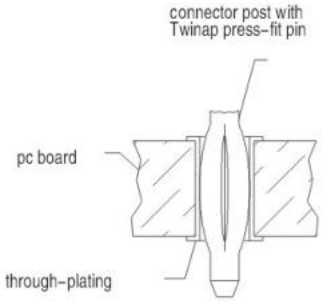
Thru Hole Specifications for Pressfit Technology, Thru Hole Drilling,SN and Bare CU

PCB Hole Tin Plated

Hole	ϕ0.71mm
Bore hole	0.80~0.83mm
Cu	25~75um
Sn	5~15um
Plated-Thru hole	0.71mm
PCB Thinkness	≥ 1.60mm
Press in Force Per Pin	SINGAL 100N Max.,POWER 300N Max
Retention Force Per Pin	SINGAL 30N Max.,POWER 90N Max



Longitudinal Section of P.T.H.
With Twinap Press-Fit Pin



Fax Request

Company

Phone

First Name

Last Name

Fax

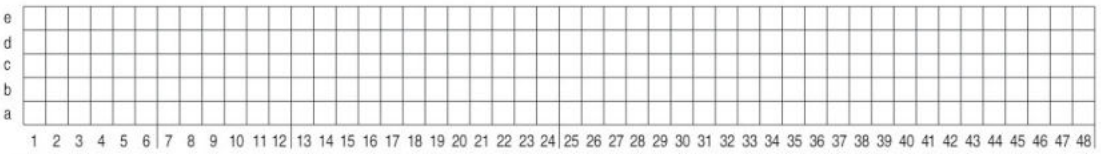
Address

Address

Signature

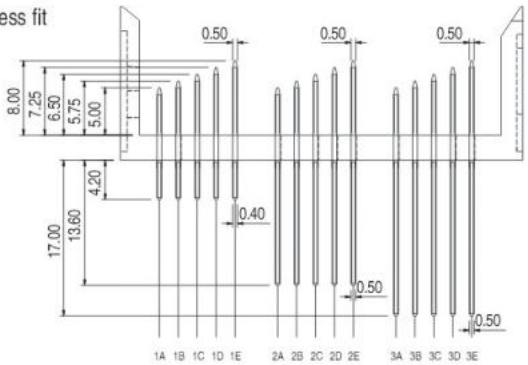
Premating and Solder Tail Request Form

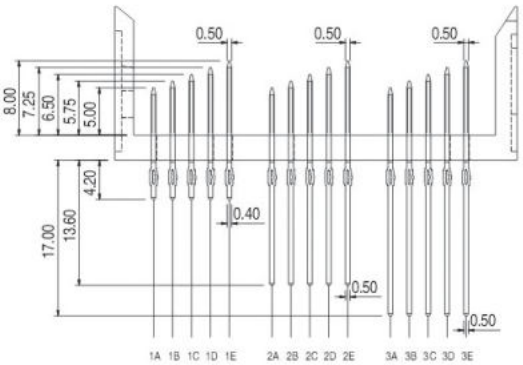
Male Special Solder Tail Length Lay-out and Male Special Premating Lay-out



☐ Solder pin

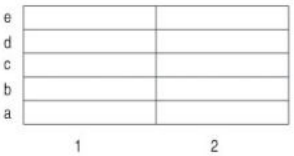
☐ press fit





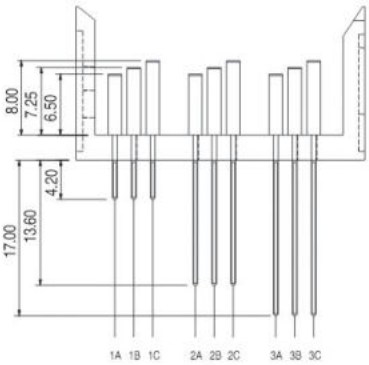
Power Type

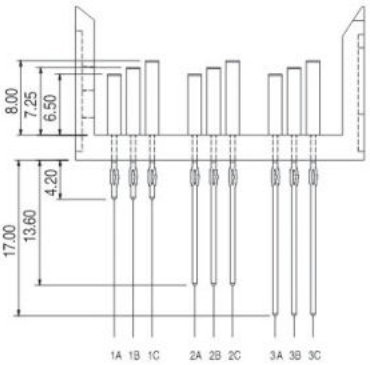
Male Special Solder Tail Length Lay-out and Male Special Premating Lay-out.



☐ Solder pin

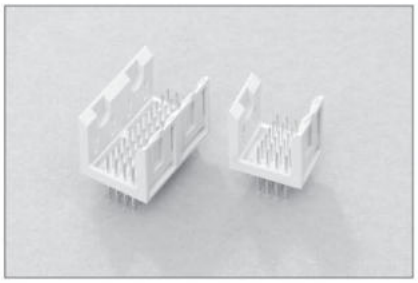
☐ press fit





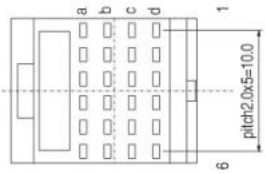
- Other special lay-out please consult to factory.

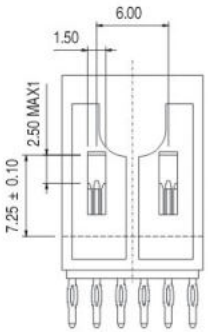
Male signal Solder & press–fit,wide body – 4 ROWS

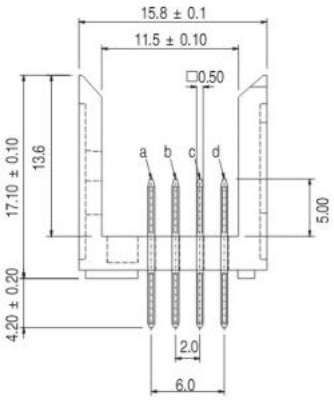


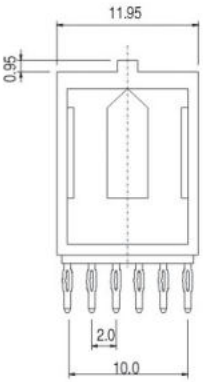
Features

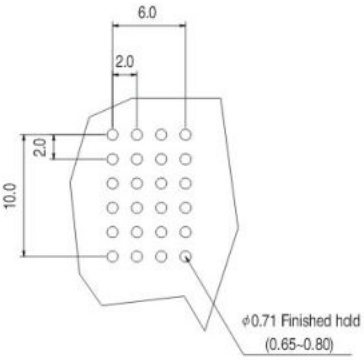
- Grid at 2 mm spacing(0.079inch)
- The wide body style or shape 2 is recommended for use with daughter board up to 2.4mm nominal thickness
- Tails fit into ϕ0.7mm nominal PCB Hole
- Stackable end to end with all other moduies
- Sequential mating(First mate/Last break) lengths
- Mares with female signal right angle solder or press–fit connector and cable connector
- Polarzation by design
- Material:LCP(SMT compatible)
- Standard plating:gold over nickel
- Please refer to page 1 for complete parts number coding











P.C.B LAYOUT

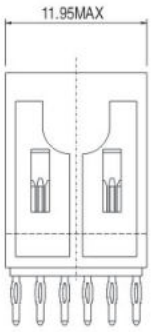
Ordering Information

No.of contact			24		48		96		144		192	
Termination Type			Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit
Termination	Mating	Plating	Parts Number									
4.2mm	D	10u"	1688–S–24 M10SD1CP2	1688–P–24 M10SD1CP	1688–S–48 M10SD1CP2	1688–P–48 M10SD1CP	1688–S–96 M10SD1CP2	1688–P–96 M10SD1CP	1688–S–144 M10SD1CP2	1688–P–144 M10SDICP	1688–S–192 M10SD1CP2	1688–P–192 M10SDICP
4.2mm	F	10u"	1688–S–24 M10SF1CP2	1688–P–24 M10SF1CP	1688–S–48 M10SF1CP2	1688–P–48 M10SF1CP	1688–S–96 M10SF1CP2	1688–P–96 M10SF1CP	1688–S–144 M10SF1CP2	1688–P–144 M10SF1CP	1688–S–192 M10SF1CP2	1688–P–192 M10SF1CP
4.2mm	G	10u"	1688–S–24 M10SG1CP2	1688–P–24 M10SG1CP	1688–S–48 M10SG1CP2	1688–P–48 M10SG1CP	1688–S–96 M10SG1CP2	1688–P–96 M10SG1CP	1688–S–144 M10SG1CP2	1688–P–144 M10SG1CP	1688–S–192 M10SG1CP2	1688–P–192 M10SG1CP

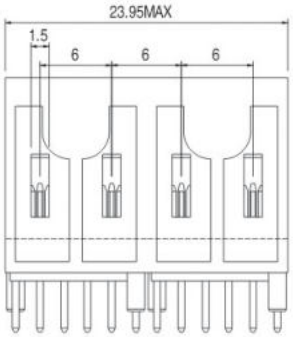
Male signal Solder & press–fit,wide body – 4 ROWS

Temination"D"

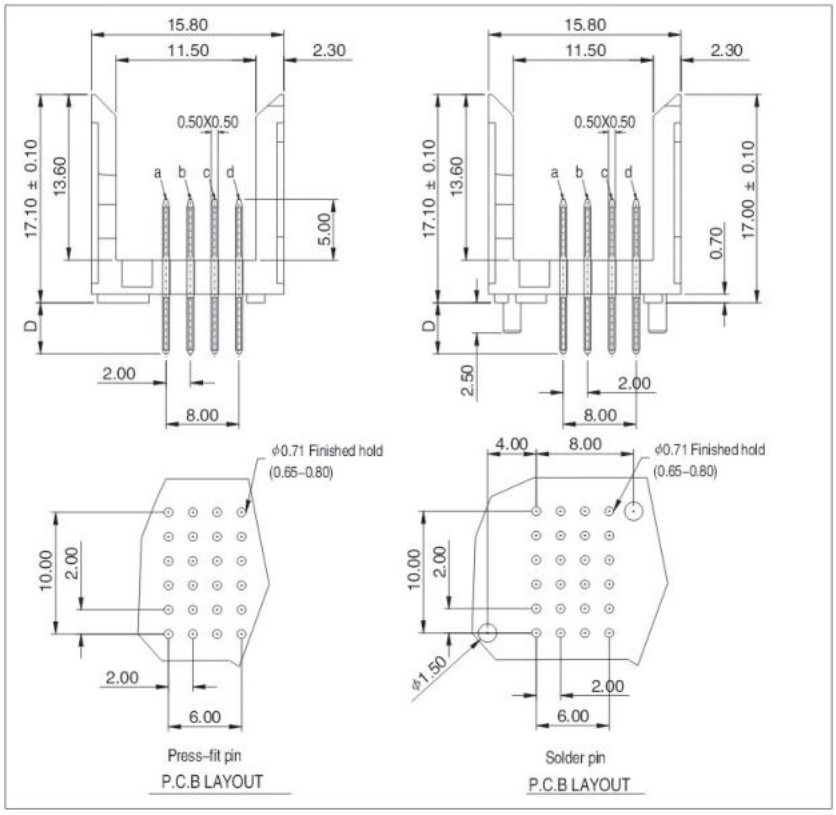
1. 4.20mm
2. 13.60mm
3. 17.00mm



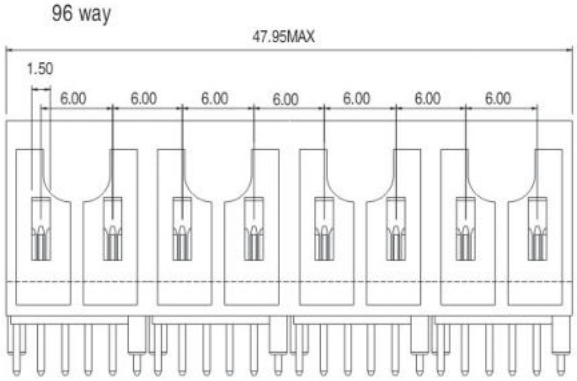
24 way



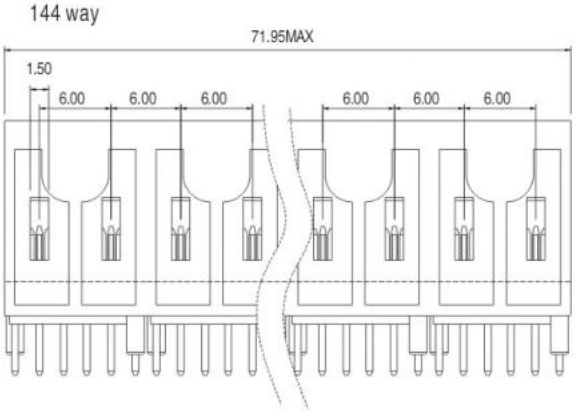
48way



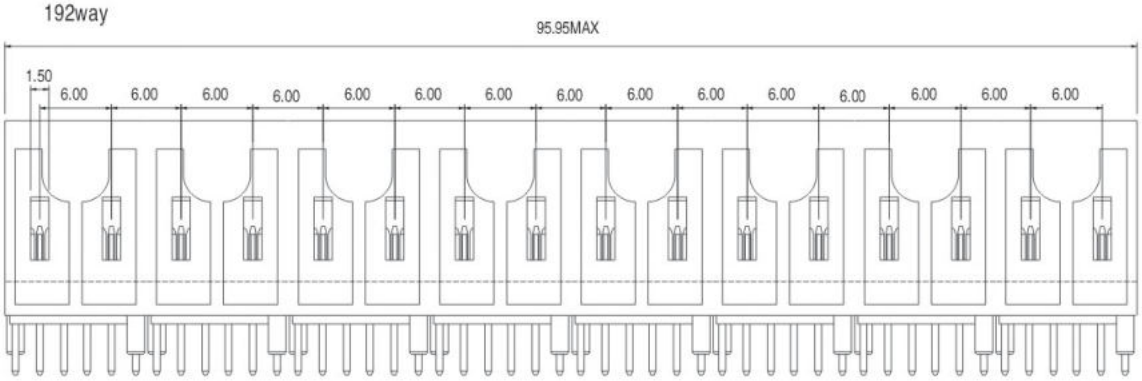
96 way



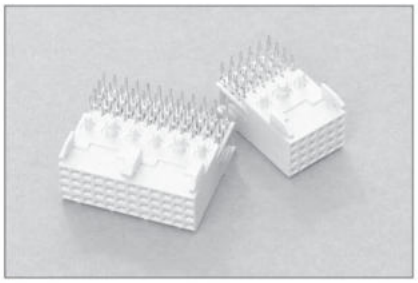
144 way



192way

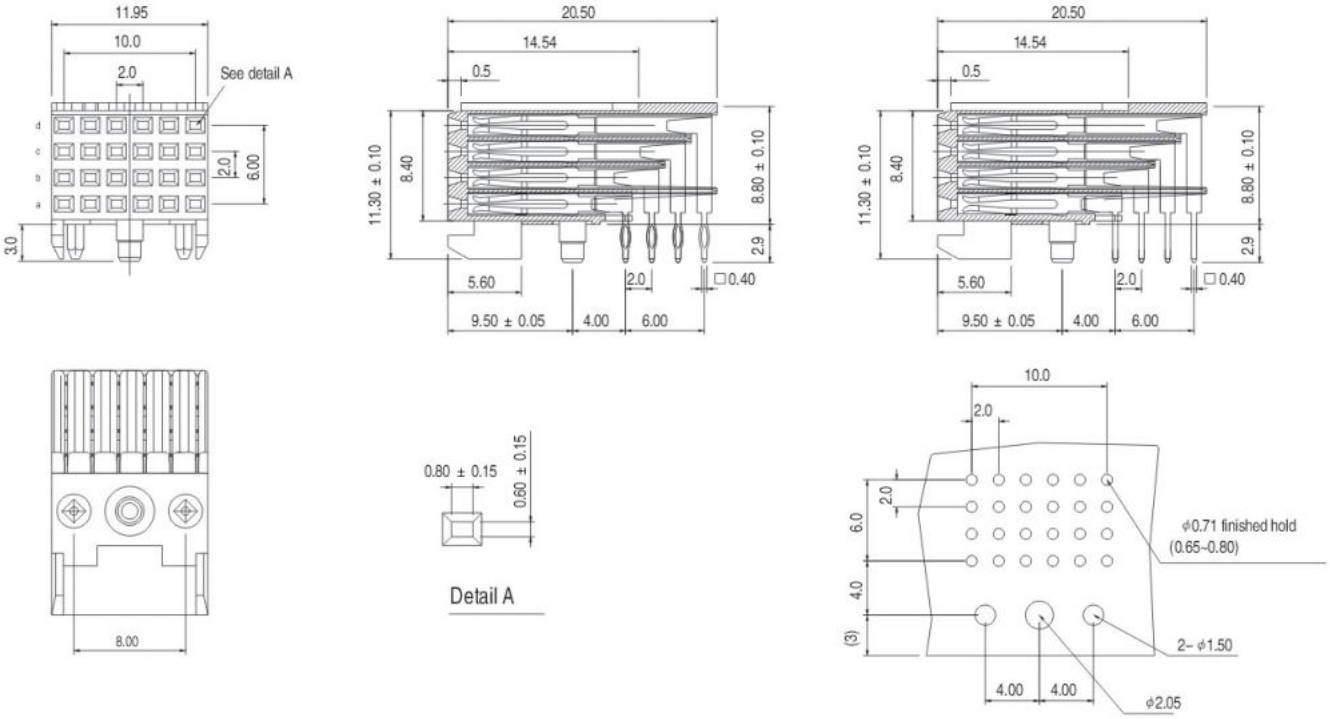


Female signal right angle Solder & press–fit,wide body – 4 ROWS



Features

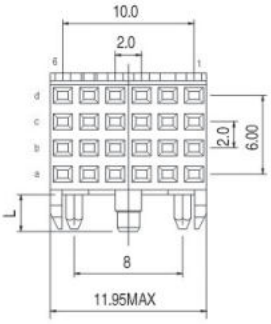
- Grid at 2 mm spacing(0.079inch)
- Tails fit into ϕ0.7mm nominal hole size
- Stackable end to end without contact loss together with other modules
- Modular flexible system
- Fixation pegs in each 12 mm module
- Recommended fixing principle s provided with forced fit pegs
  3.2 mm PCB thickness cannot be accomodated
- Polarzation by design
- Material: LCP(SMT compatible)
- Standard plating:gold over nickel
- Please refer to page 1 for complete parts number coding

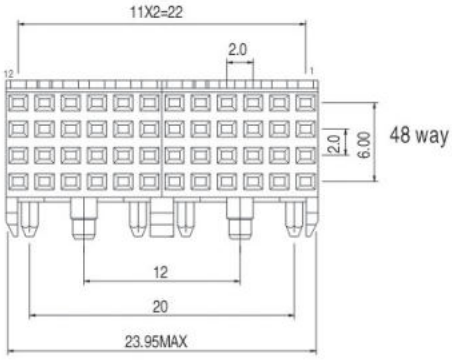


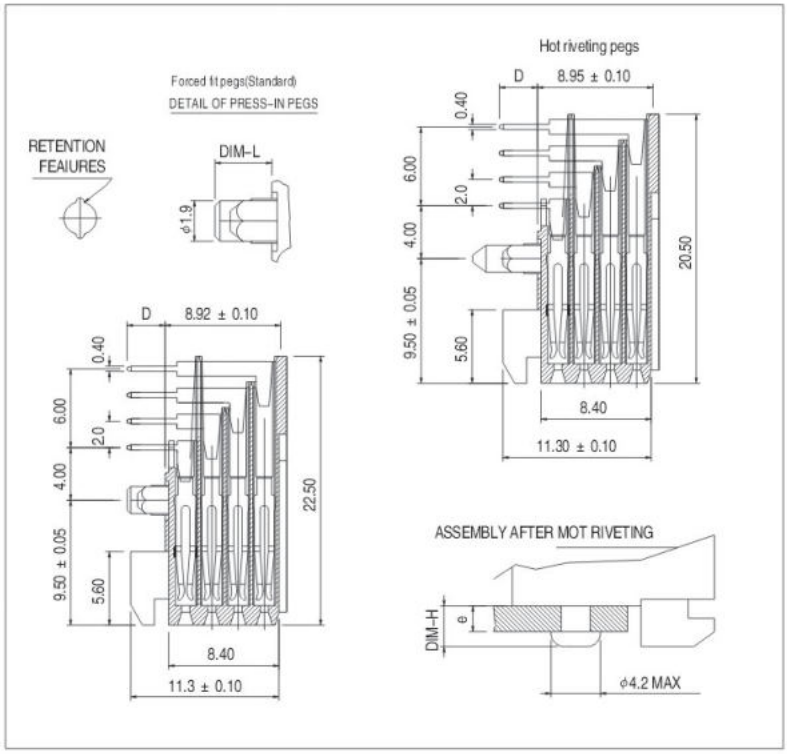
Ordering Information

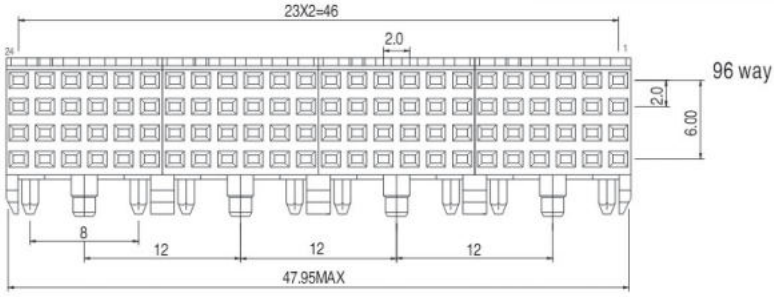
No.of contact			24		48		96		144		192	
Termination Type			Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit
Forced Fit Peg	Termination Length	Plating	Parts Number									
3.0mm	2.9mm	10u"	1688–S–24 F10R01AP1	1688–P–24 F10R01AP1	1688–S–48 F10R01AP1	1688–P–48 F10R01AP1	1688–S–96 F10R01AP1	1688–P–96 F10R01AP1	1688–S–144 F10R01AP1	1688–P–144 F10R01AP1	1688–S–192 F10R01AP1	1688–P–192 F10R01AP1

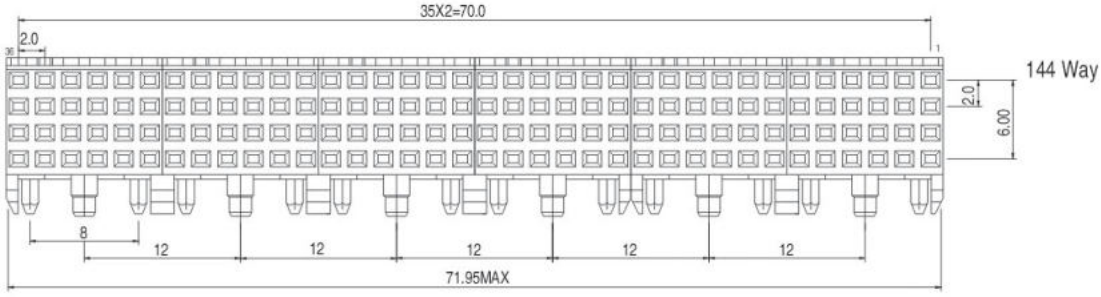
Female signal Solder & press-fit,wide body – 4 ROWS

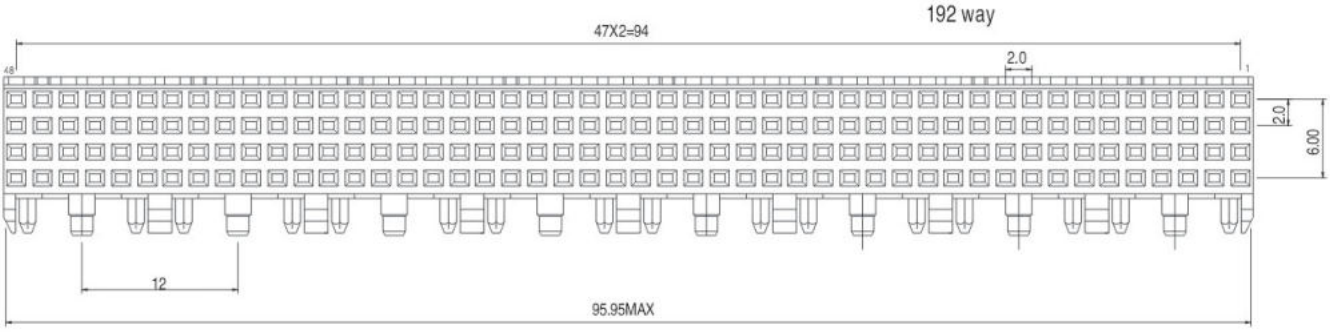




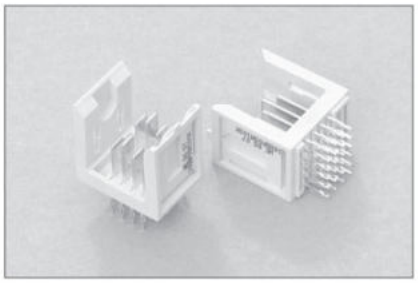






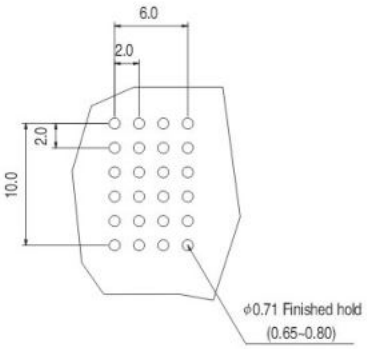


Male power press–fit & solder pin,wide body – 4 ROWS

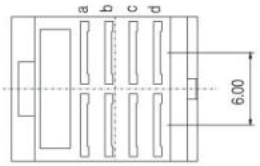


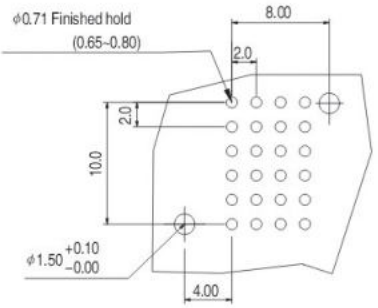
Features

- Recommended for use on PCBup to 2.4mm nominal thickness
- Module of 12mm width interchangeable
  with signal 24 pins connector on the same footprint
- Stackable end to end without contact loss with other modules
- Modular flexible system
- Sequential mating(Fist mate/Last break)lengths
- Tails fit into ϕ0.7mm nominal PCB Hole
- Polarization by design
- Material:LCP(SMT compatible)
- Standard plating: gold over nickel
- Current rating: 3A
- Please refer to page 1 for complete parts number coding

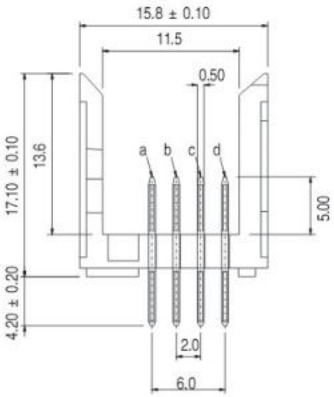


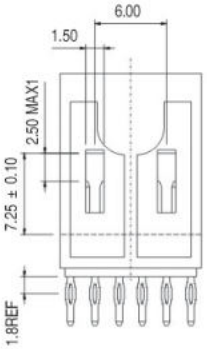
P.C.B LAYOUT



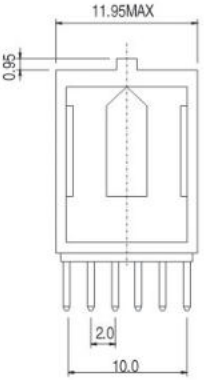


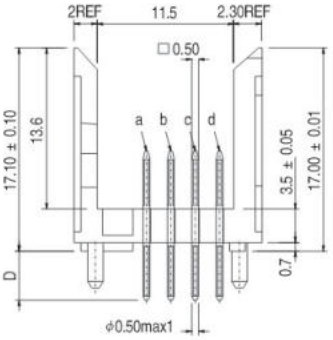
P.C.B LAYOUT





Press–fit pins



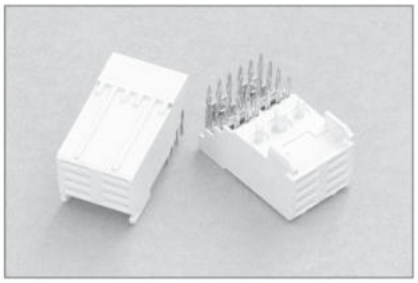


Solder pin

Ordering Information

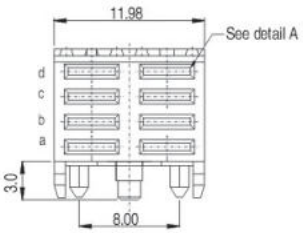
No.of contact			8–pins	
Termination Type			Solder	Press Fit
Termination Length	Mating	Plating	Parts Number	
4.2mm	D	30u"	1688–S–8M30SD1P2	1688–P–8M30SD1CP
4.2mm	H	30u"	1688–S–8M30SH1P2	1688–P–8M30SH1CP
4.2mm	K	30u"	1688–S–8M30SK1P2	1688–P–8M30SK1CP

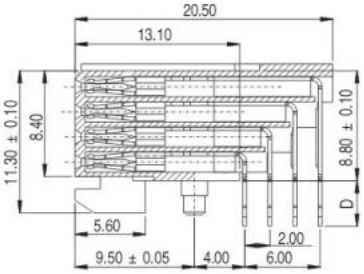
Female power right angle press–fit,wide body – 4 ROWS

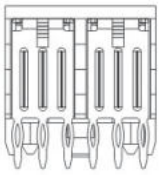


Features

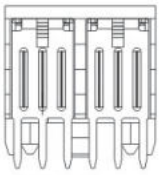
- Module of 12mm width interchangeable with signal 24 pins connector on the same footprint
- Stackable end to end without contact loss with other signal or power modules
- Modular flexiblesystem
- Tails fit into ϕ0.7 mm nominal PCB Hole
- Fixation pegs can be either hot riveting pegs or forced fit pegs
- Tails fit into ϕ0.7mm nominal PCB Hole
- Polarization by design
- Material: LCP(SMT compatible)
- Standard plating: gold over nickel
- Current rating: 3A
- Please refer to page 1 for complete parts number coding



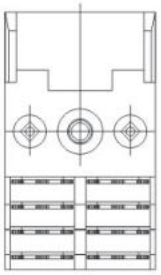


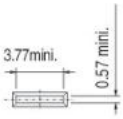


Press–Fit

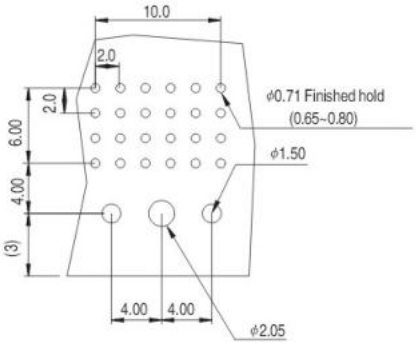


Solder Type





Detail A 2:1

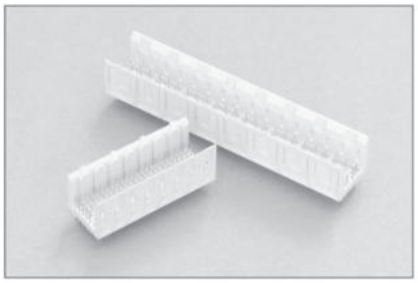


P.C.B LAYOUT

Ordering Information

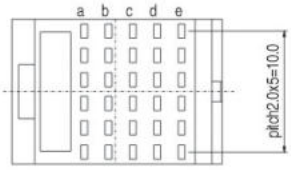
No.of contact(90 ° power)			8–pins	
Termination			Solder	Press fit
Termination Length	Forced Fit Peg	Plating	Parts Number	
3.6mm	3.0mm	30u"	1688–S–8F30R01AP1	1688–P–8F30R01AP1

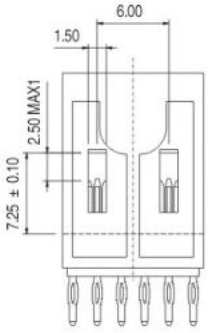
Male signal Solder & press–fit,wide body – 5 ROWS

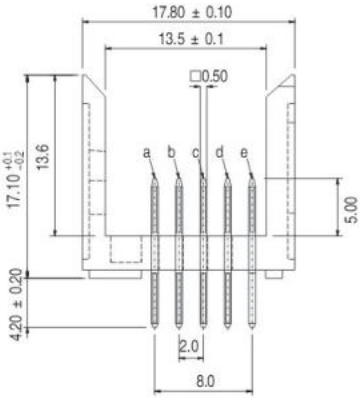


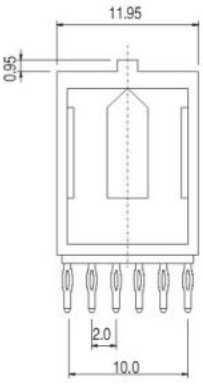
Features

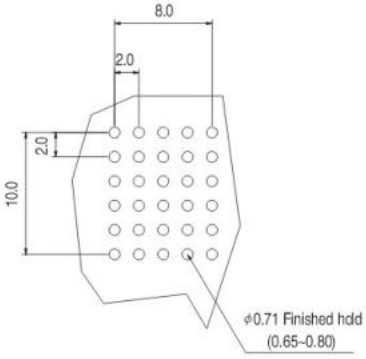
- Grid at 2 mm spacing(0.079inch)
- The wide body style or shape 2 is recommended for use with daughter board up to 2.4mm nominal thickness
- Tails fit into ϕ0.7mm nominal PCB Hole
- Stackable end to end with all other moduies
- Sequential mating(First mate/Last break) lengths
- Mares with female signal right angle solder or press–fit connector and cable connector
- Polarzation by design
- Material:LCP(SMT compatible)
- Standard plating:gold over nickel
- Please refer to page 1 for complete parts number coding











P.C.B LAYOUT

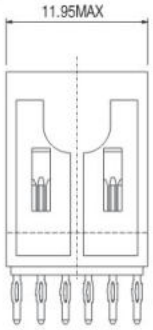
Ordering Information

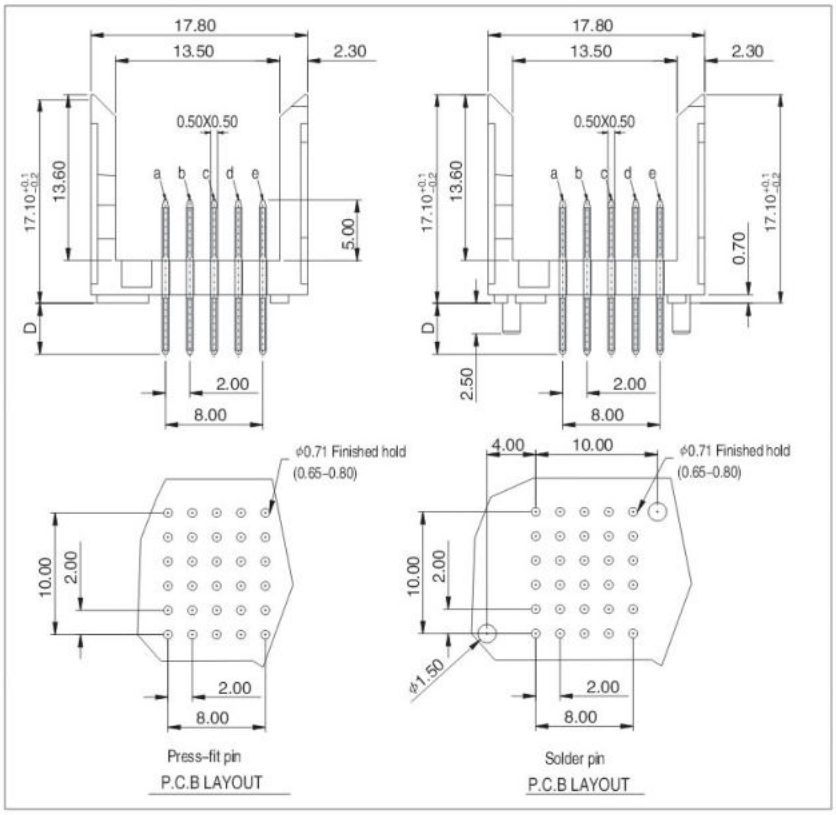
No.of contact			30		60		90		120		240	
Termination Type			Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit
Termination	Mating	Plating	Parts Number									
4.2mm	D	10u"	1688–S–30 M10SD1CP2	1688–P–30 M10SD1CP	1688–S–60 M10SD1CP2	1688–P–60 M10SD1CP	1688–S–90 M10SD1CP2	1688–P–90 M10SD1CP	1688–S–120 M10SD1CP2	1688–P–120 M10SD1CP	1688–S–240 M10SD1CP2	1688–P–240 M10SDICP
4.2mm	F	10u"	1688–S–30 M10SF1CP2	1688–P–30 M10SF1CP	1688–S–60 M10SF1CP2	1688–P–60 M10SF1CP	1688–S–90 M10SF1CP2	1688–P–90 M10SF1CP	1688–S–120 M10SF1CP2	1688–P–120 M10SF1CP	1688–S–240 M10SF1CP2	1688–P–240 M10SF1CP
4.2mm	G	10u"	1688–S–30 M10SG1CP2	1688–P–30 M10SG1CP	1688–S–60 M10SG1CP2	1688–P–60 M10SG1CP	1688–S–90 M10SG1CP2	1688–P–90 M10SG1CP	1688–S–120 M10SG1CP2	1688–P–120 M10SG1CP	1688–S–240 M10SG1CP2	1688–P–240 M10SG1CP

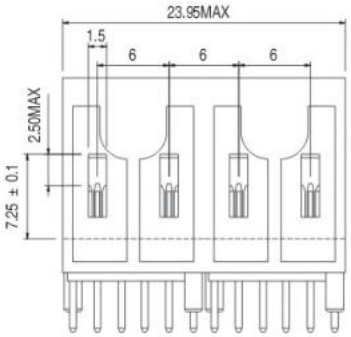
Male signal Solder & press–fit,wide body – 5 ROWS

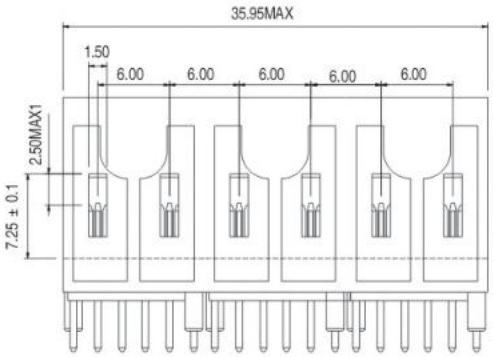
Temination"D"

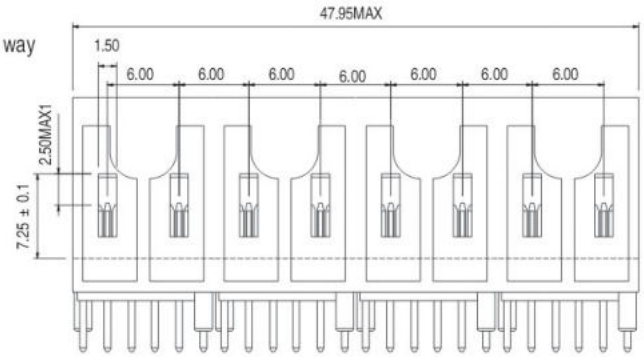
1. 4.20mm
2. 13.60mm
3. 17.00

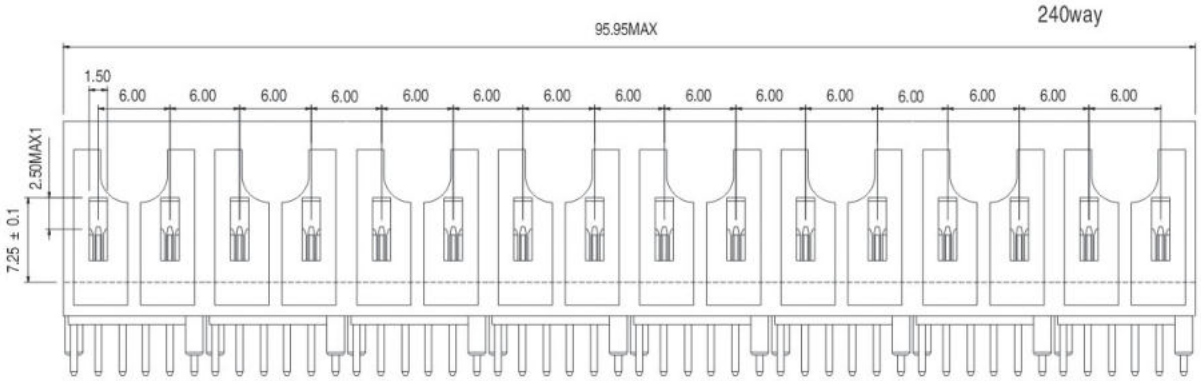




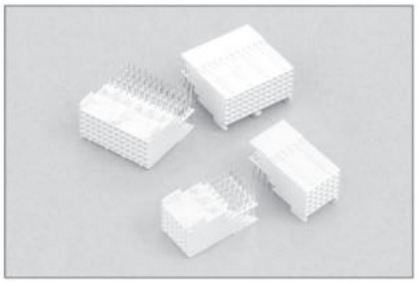






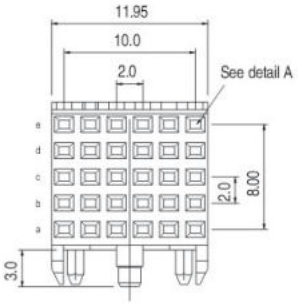


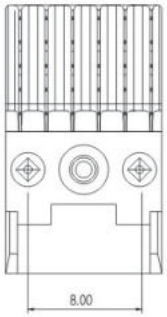
Female signal right angle Solder Pin& press–fit,wide body – 5 ROWS

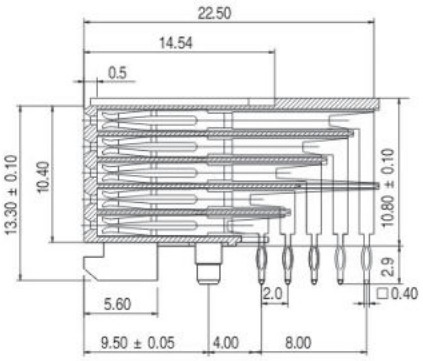


Features

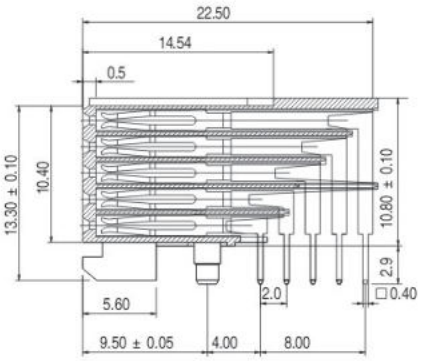
- Grid at 2 mm spacing(0.079inch)
- Tails fit into ϕ0.7mm nominal hole size
- Stackable end to end without contact loss together with other modules
- Modular flexible system
- Fixation pegs in each 12 mm module
- Recommended fixing principle s provided with forced fit pegs
  3.2 mm PCB thickness cannot be accomodated
- Polarzation by design
- Material: LCP(SMT compatible)
- Standard plating:gold over nickel
- Please refer to page 1 for complete parts number coding



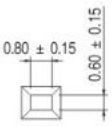




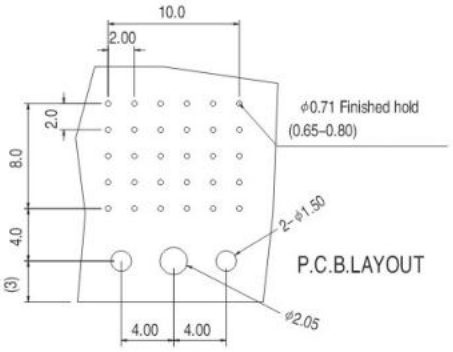
Press–fit pin



Solder pin



Detail A

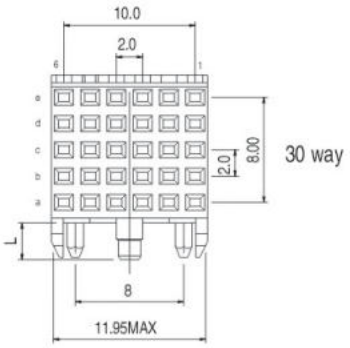


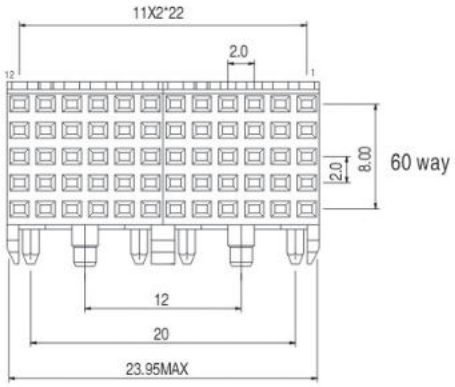
P.C.B.LAYOUT

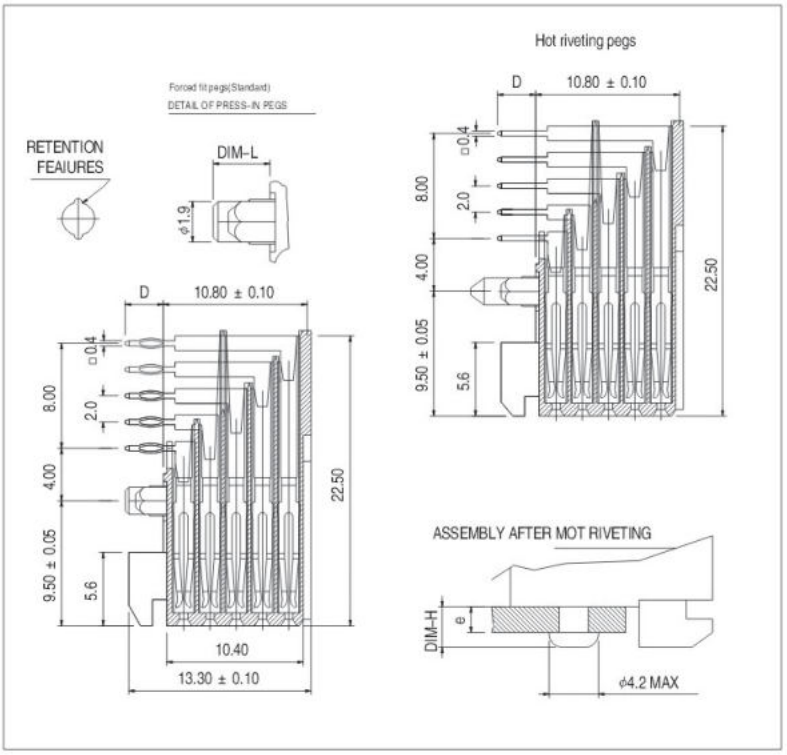
Ordering Information

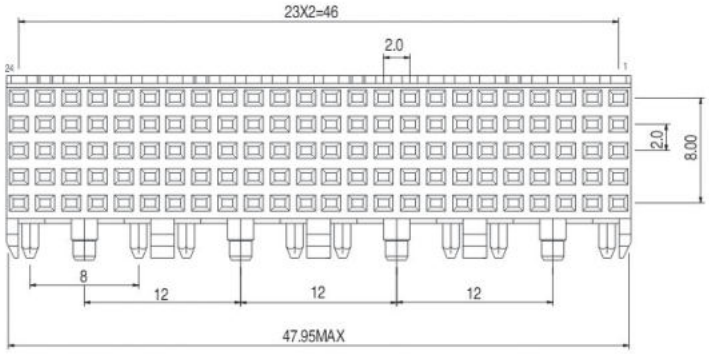
No.of contact			30		60		120		240	
Termination Type			Solder	Press Fit	Solder	Press Fit	Solder	Press Fit	Solder	Press Fit
Forced Fit Peg	Termination Length	Plating	Parts Number							
3.0mm	2.9mm	10u"	1688–S–30 F10R01AP1	1688–P–30 F10R01AP1	1688–S–60 F10R01AP1	1688–P–60 F10R01AP1	1688–S–120 F10R01AP1	1688–P–120 F10R01AP1	1688–S–240 F10R01AP1	1688–P–240 F10R01AP1

Female signal right angle Solder & press–fit,wide body – 5 ROWS

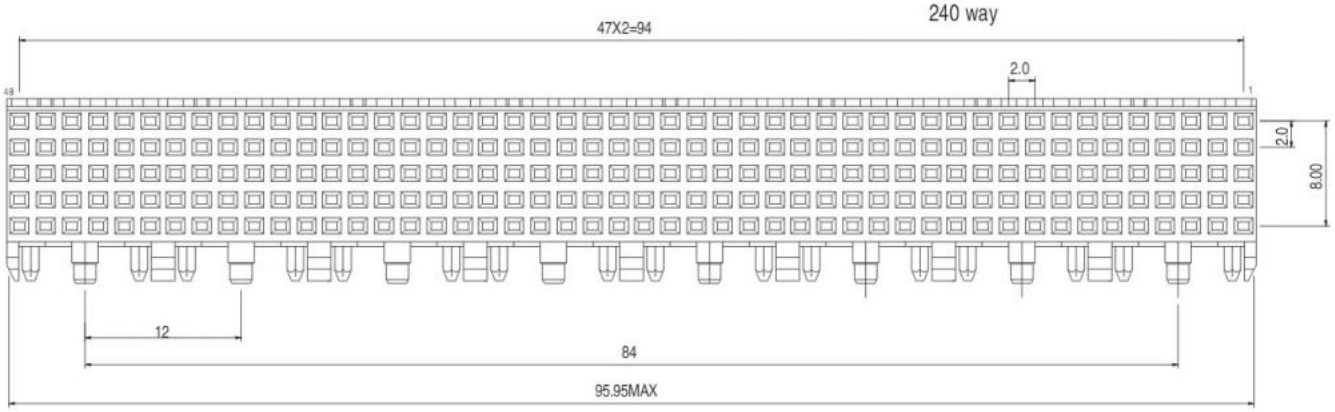




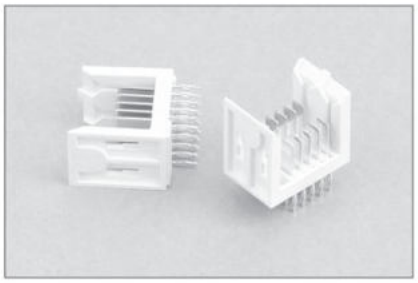




PCB thickness	Dim.D	Dim.L	
1.6	2.90 ± 0.3	5.20	Hot riveting peg
2.4	2.90 ± 0.3	5.20	
1.6	2.90 ± 0.3	3.00	Forced fit peg
2.4	2.90 ± 0.3	3.00	

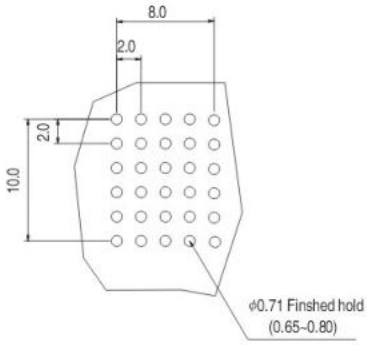


Male power press–fit & solder pin,wide body – 5 ROWS

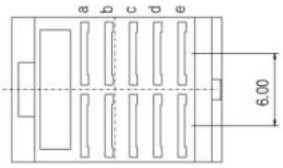


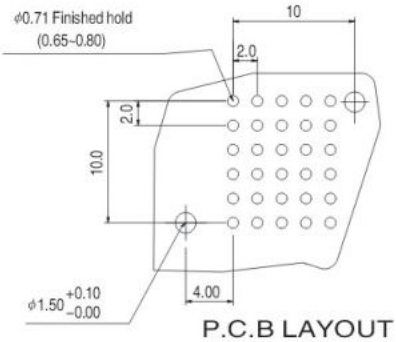
Features

- Recommended for use on PCBup to 2.4mm nominal thickness
- Module of 12mm width interchangeable with signal 24 pins connector on the same footprint
- Stackable end to end without contact loss with other modules
- Modular flexible system
- Sequential mating(Fist mate/Last break)lengths
- Tails fit into ϕ0.7mm nominal PCB Hole
- Polarization by design
- Material:LCP(SMT compatible)
- Standard plating: gold over nickel
- Current rating: 3A
- Please refer to page 1 for complete parts number coding

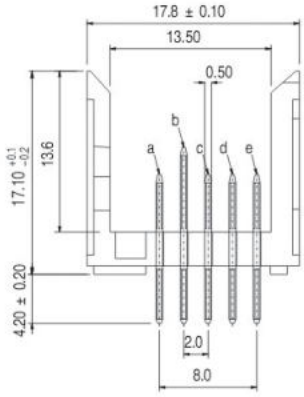


P.C.B LAYOUT

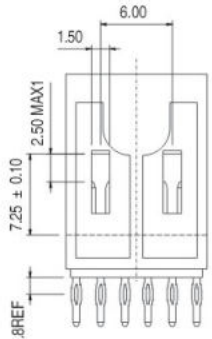


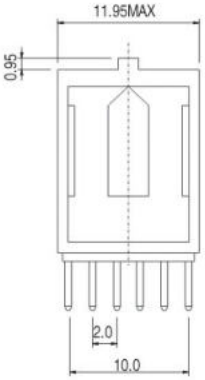


P.C.B LAYOUT

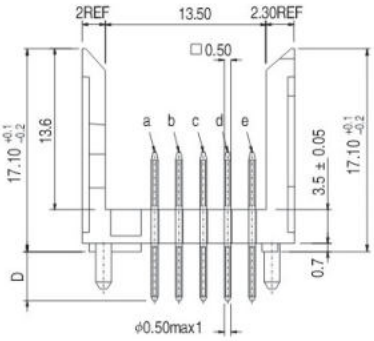


Press–fit pins





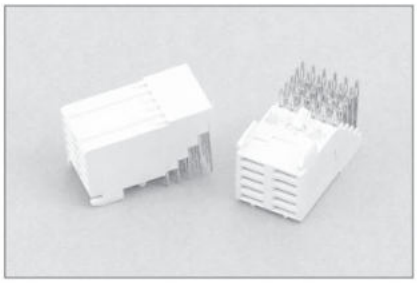
Solder pin



Ordering Information

No.of contact			10–pins	
Termination Type			Solder	Press Fit
Termination Length	Mating	Plating	Parts Number	
4.2mm	D	30u"	1688–S–10M30SD1P2	1688–P–10M30SD1CP
4.2mm	H	30u"	1688–S–10M30SH1P2	1688–P–10M30SH1CP
4.2mm	K	30u"	1688–S–10M30SK1P2	1688–P–10M30SK1CP

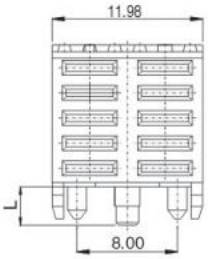
Female power right angle press–fit,wide body – 5 ROWS

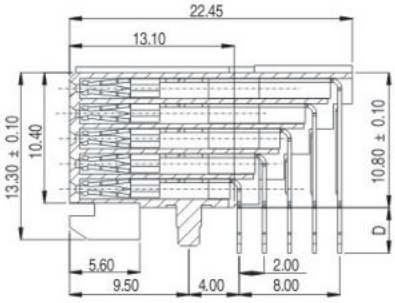


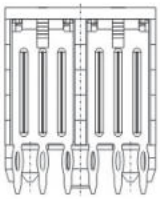
Features

- Module of 12mm width interchangeable with signal 24 pins connector on the same footprint
- Stackable end to end without contact loss with other signal or power modules
- Modular flexible system
- Tails fit into ϕ0.7 mm nominal PCB Hole
- Fixation pegs can be either hot riveting pegs or forced fit pegs
- Polarization by design
- Material: LCP(SMT compatible)
- Standard plating: gold over nickel
- Current rating: 3A
- Please refer to page 1 for complete parts number coding

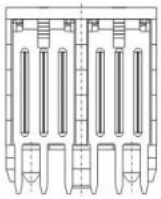
A TYPE



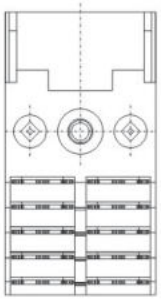




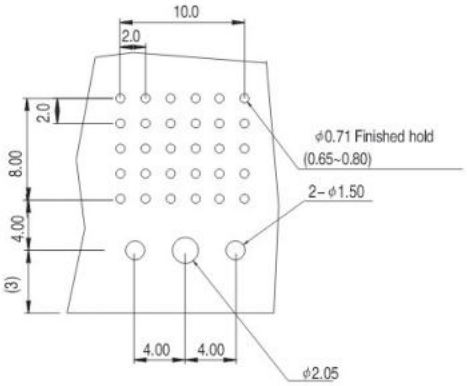
Press fit



Solder



Detail A 2:1

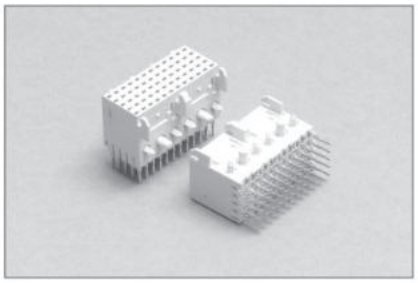


P.C.B LAYOUT

Ordering Information

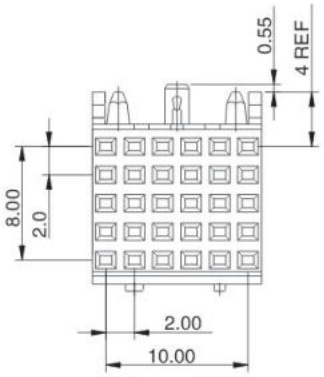
No.of contact(90° power)			10–pins	
Termination			Press fit	Solder
Termination Length	Forced Fit Peg	Plating	Parts Number	Parts Number
3.6mm	3.0mm	30u"	1688–P–10F30R01AP1A	1688–S–10F30R01AP1A

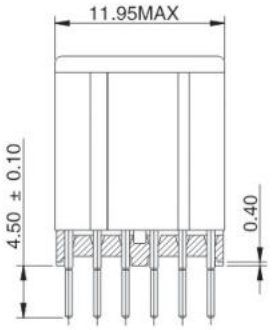
Female signal straight solder or press-fit,pins – 5 ROWS

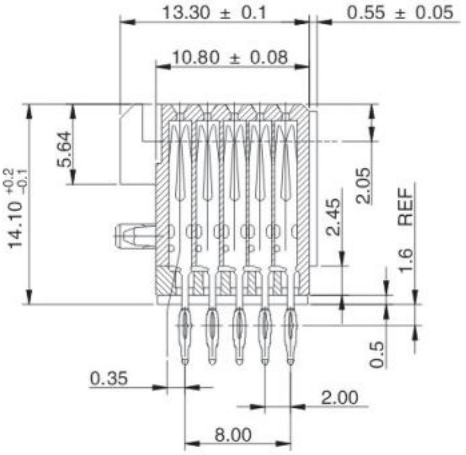


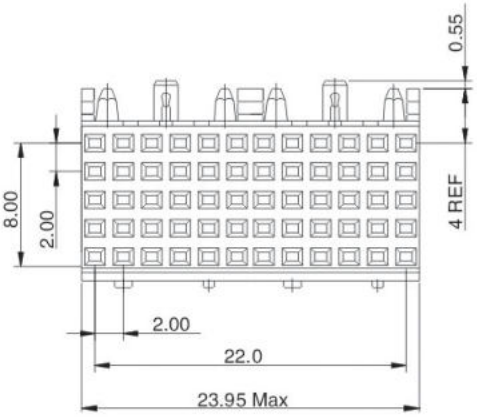
Features

- Grid at 2 mm spacing(0.079inch)
- Stackable end to end without contact loss
- Recommended for use with parallel PCB
- Compatible with straight or right angle male connectors
- Material: LCP(SMT compatible)
- Standard plating:gold over nickel
- Possibility of longer press-fit termination
- Use a special insertion tool for press-in process

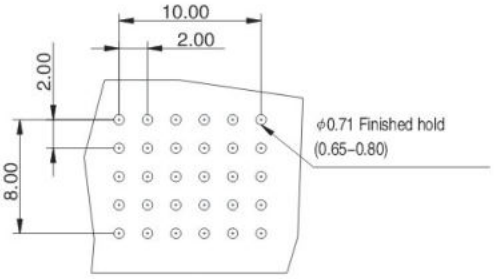








60 way

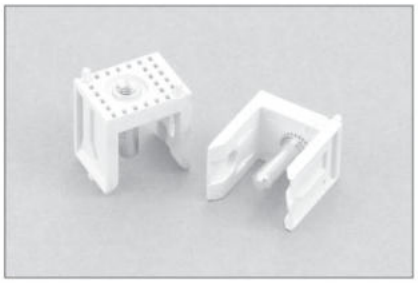


P.C.B.LAYOUT

Ordering Information

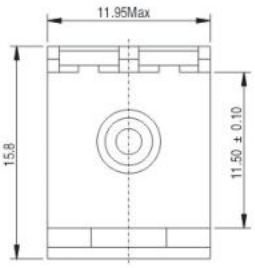
No.of contact		30	60
Termination Type		Press Fit	
Termination	Plating	Parts Number	
4.2mm	10u"	1688-P-30 F10SO1CP1	1688-P-60 F10SO1CP1

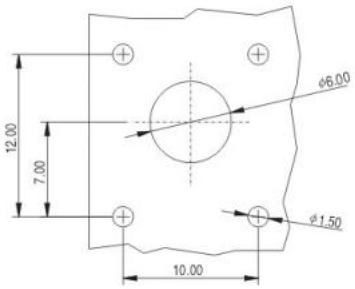
Male – 1ROW



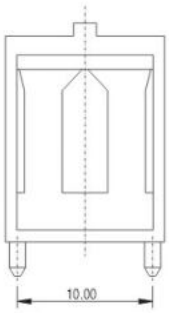
Features

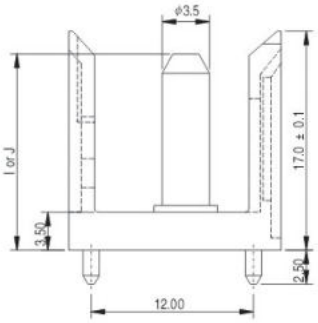
- Stackable end to end without loss of position
- Modular flexible system
- Uses cavities as per DIN 41612
- Polarization by design

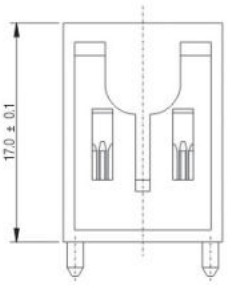




P.C.B.Layout

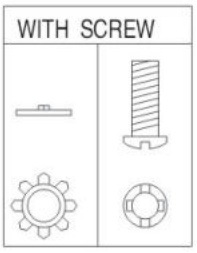






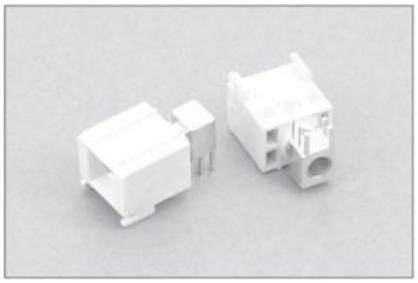
Ordering Information

No.of contact		1
Plating		30u" Au
		Part Number
Mating length I 14.5	With screw	1688-S-1M310SI1-1
	Without screw	1688-S-1M310SI1-0
Mating length J 16.0	With screw	1688-S-1M310SJ1-1
	Without screw	1688-S-1M310SJ1-0



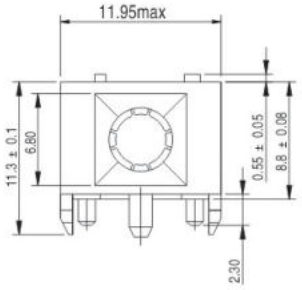
Pin Type	I	J
A	14.5	16.0

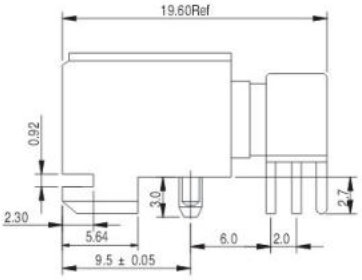
Female – 1 ROW

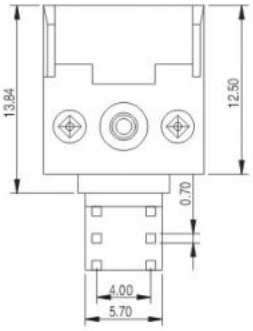


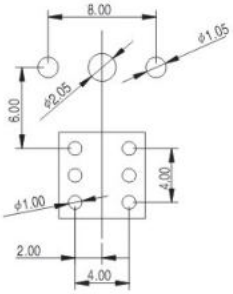
Features

- Stackable end to end without loss of position
- Modular flexible system
- Uses cavities as per DIN 41612
- Polarization by design









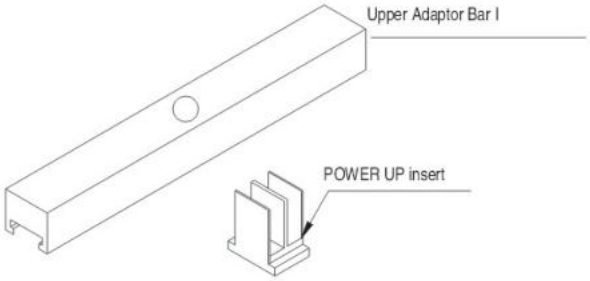
P.C.B.Layout

Ordering Information

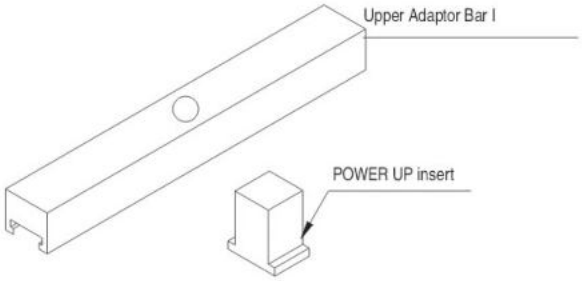
No.of contact	1
Termination Type	Solder
Plating	Parts Number
10u"	1688-S-1-F110R01

Application Toolings

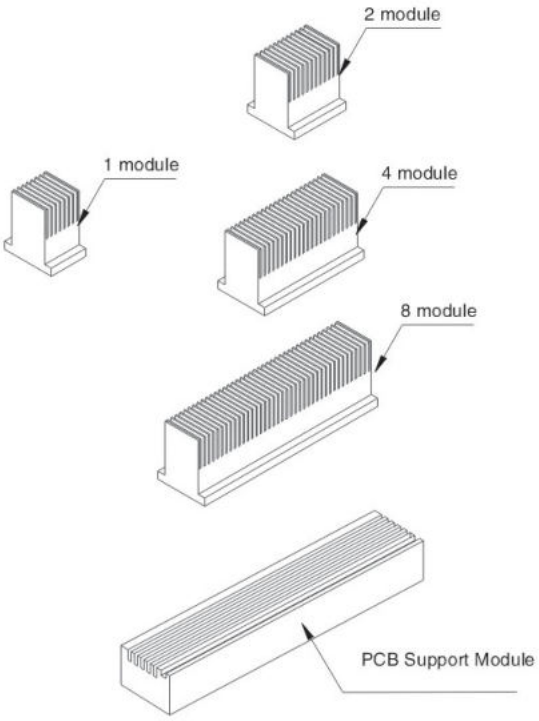
Male Connector Insertion



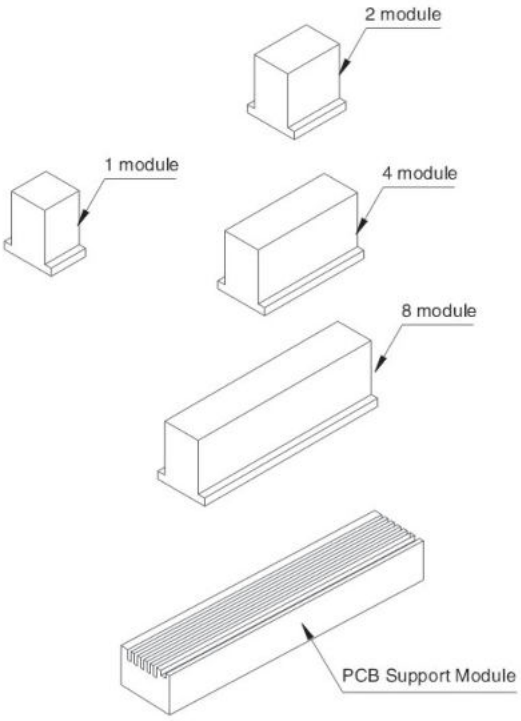
Female Connector Insertion



Signal 5 Rows
UP insert



Signal 5 Rows
UP insert



Ordering Information

Description	Tool Part Number
Upper Adaptor Bar I	MHUAB I
Upper Insert – power	MFBUiP
Upper Insert – Signal 1 module	MFBUiS 1
Upper Insert – Signal 2 module	MFBUiS 2
Upper Insert – Signal 4 module	MFBUiS 4
Upper Insert – Signal 8 module	MFBUiS 8
PCB Support Module –	FFBPSM

Ordering Information

Description	Tool Part Number
Upper Adaptor Bar I	FFBUAB I
Upper Insert – power	FFBUiP
Upper Insert – Signal 1 module	FFBUiS 1
Upper Insert – Signal 2 module	FFBUiS 2
Upper Insert – Signal 4 module	FFBUiS 4
Upper Insert – Signal 8 module	FFBUiS 8
PCB Support Module –	FFBPSM

Ordering Information

1688 H 2 A 110 2Fd –0 –15 –00

Series No.

2.0mm Hard metric

Location peg

00=without location peg
10=with location peg
(For A,C,L,M,N Type only)

Contact finish

contact area	Tails
15: 0.38um Au	Tin
30: 0.76um Au	Tin
40: 1.0um Au	Tin

For male long tails version
(13mm,14.5mm,16mm)

Contact area	Tail to mating point
360: 0.76um Au	0.76um Au
Tin plated or nickel	plated in the middle
310: 0.76um Au	0.76um Au
Gold flash in the middle	

1: Female module 90 °
2: Male module 180 °
3: Female module 180 °
4: Male module 90 °

Module Type

A=A Type
B5=B25 Type L=L Type AB5=AB25 Type
B2=B22 Type M=M Type AB2=AB22 Type
B1=B19 Type N=N Type AB1=AB19 Type
C=C Type P=3 power contact
(Please Refer Page 40.41)

Total Pin Counts

(Include signal & grounding pins.
Exclude shielding pin)

Code for mating length for male and Contact arrangement for female

Male:Tail mating length/Front mating length

A=3.7mm/ 8.2mm
B=3.7mm/ 9.7mm
C=3.7mm/ 11.2mm
D=4.5mm/ 8.2mm
E=4.5mm/ 9.7mm
F=4.5mm/ 11.2mm
K=13.0mm/ 8.2mm
L=13.0mm/ 9.7mm
M=13.0mm/ 11.2mm
N=14.5mm/ 8.2mm
P=14.5mm/ 9.7mm
Q=14.5mm/ 11.2mm
R=16.0mm/ 8.2mm
S=16.0mm/ 9.7mm
T=16.0mm/ 11.2mm

1x=Any one row has more than one different lenth contact in it .
Please consult factory to assign code no.

Ground and Shield

–1: Male 180 ° row z &f with grounding pins,Female 90 ° with upper shield cover
–0: Male 180 ° without grounding pins and Female 90 ° without upper shielding cover,
Order female 90 ° bottom shielding covers separately.

Female

2Fd: Row b,d with pins
3Fc: Row a,b,c with pins
3Fe: Row a,c,e with pins
4Fd: Row a,b,c,d with pins
5Fe: Row a,b,c,d,e with pins.

UL Approval

WEITRONIC 2.0mm Hard Metric Connector Series

Overiew

WEITRONIC 2.0mm HARD METRIC CONNECTOR MODULES comply with international IEC 917 and IEC 61076-4-101 standards.The connector systems in telecommunication and other industries require hight density connectors to support larger amounts of data increasingly higher speeds WEITRONIC 2mm hardmetric modules offer the solution.

Features and Benefits

- This high density connector modules can be stacked end to end without loss of space.
- WEITRONIC developed the 2.0mm series under thorough consideration of impedance match,propagation delay. cross talk,reflection.It is the ideal connector for digital high speed data application.
- WEITRONIC offers differend types with inverted mating configuration.The male connector is a fixed module at the backplane and the female connector is a free component of the plug-in module.The male connector has 5 signal row.
- The outer shielding rows z and f of the male connector engage the shielding contacts of the famale connector.the shield is also designed for gas tight, press-fit installation.
- The connector system offers 15 contact length that utilize the proven press-fit assembly technique.Within the 15 contact length are 3 mating levels,achievable on both the plug-in and rear I/O side.
- Coding system prevents mix-up and wrong mating between male and female connectors.
- The 2.0mm hard metric connectors and DIN 41612 connectors can be used on the same PC board as both have the same mating distance.
- Staggered make-break pin populations for optional hot-swap capability.
- Rear pin option for through-the-backplatne I/O application.
- High density PCI capability,shield for EMI/RFI protection.

Mechanical and Electrical Characteristics

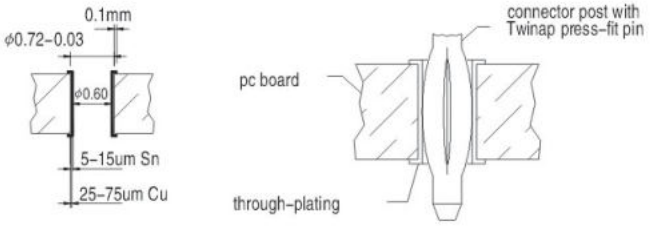
Technical data

Grid Size	2.0mm
Operating temperature	-55 ℃ to+125 ℃
Insulation Material	Glass filled Polyester,UL94V-0
Contact Material	Phosphor Bronze
Air and Creepage Distance	Male 0.8mm,Female 0.6mm
Contact Levels	5.3mm-Leve 1 6.8mm-Leve 2 8.3mm-Leve 3
Press-in force	100N/pin Max.
Retention force	20N/pin Min.
Mating Force per Signal Contact	N x 0.75N Max
Mating Force per Shield Contact	N x 1N Max
Withdrawal Force	0.15N Min.
Termination Technique Misalignment	Compliant Press-Fit Longitudinal ± 2.0mm Latitudinal ± 2.5mm
Inclination	± 2 degree
Current Rating	1.5A AT 20 ℃ ,1.0A AT 70 ℃
Test Voltage	750 Vrms
Contact Resistance	20m(ohm) Max.
Insulation Resistance	10^4 M(ohm) Min.

Recommended P.C.B Plate Through Holes

Drilled Hole	ϕ0.69-0.72mm
Cu	Min.25um
Sn	5-15 um
Plated Through Hole	ϕ0.55-0.65mm

Longitudinal Section of P.T.H.
With Twinap Press-Fit Pin



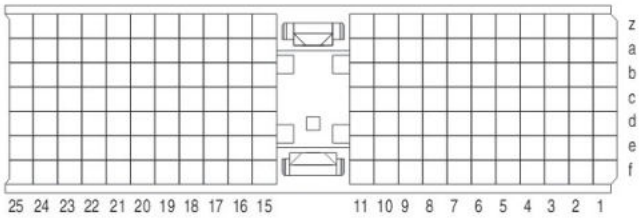
Customer Request Form

Company:	Tel:
Contact Name:	Fax:
Address:	E-Mail:
Signature:	Date:
Sample Qty Required:	Estimated Annual Usage:

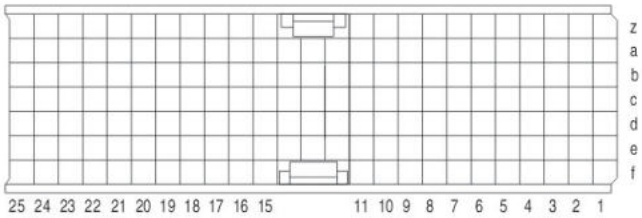
Fill in diagram below with designated contact types required. Unfilled positions to be left blank.

Type A Connector

Module A

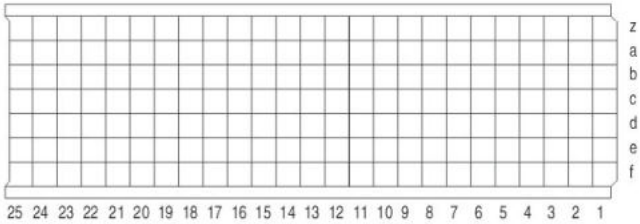


Type AB25

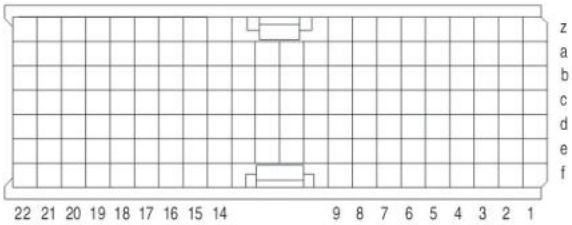


Type B Connector

Module B

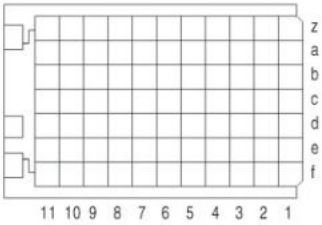


Type AB22



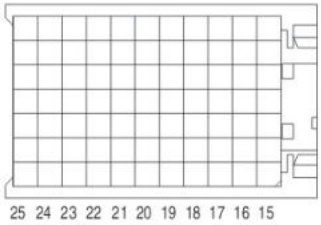
Type C Connector

Module C

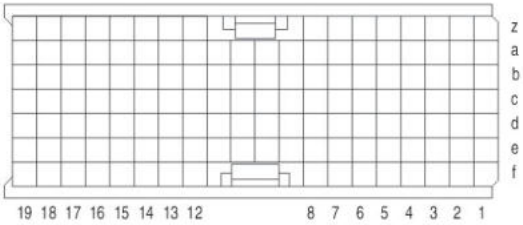


Type M Connector

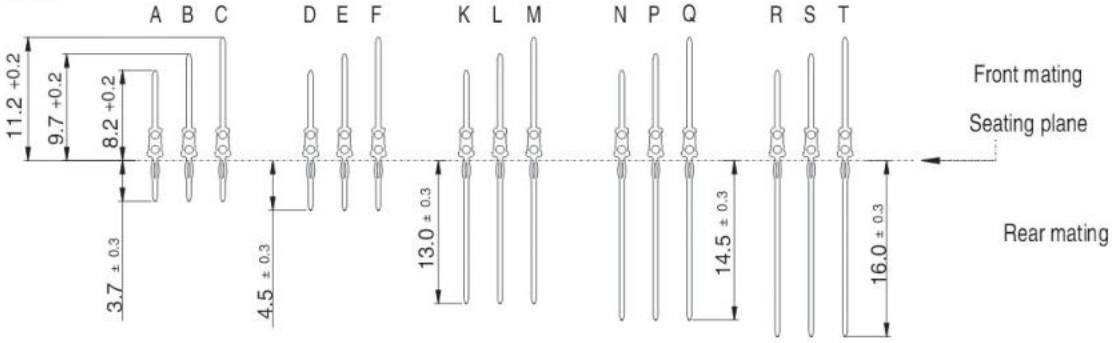
Module M



Type AB19

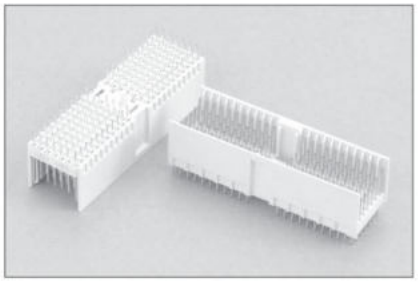


Male Contact Options



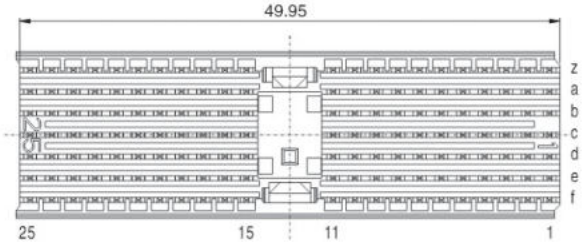
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

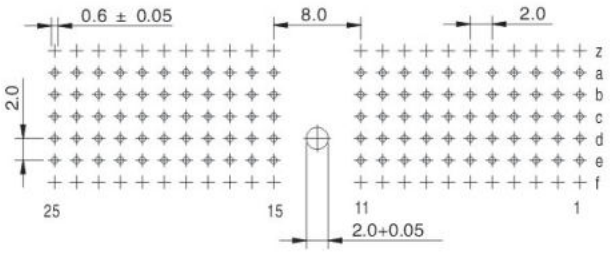
Vertical Male Type A&C Connectors for Fix Boards



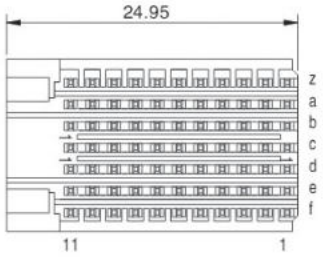
- Type A Connectors provides 110 sighal contcts plus 44 optional shielding contacts in 5+2 row x 25 position.The MPC (multipurpose center)provides alignment guides and acceprs oprional coding keys.
- Type C vertical male Connector provides 55 signal contcts and optional 22 shielding contacts in 5+2 row x 11 position This half-size connectoris polarized and the insulator features guides for alignment of the mating cinnectors.
- Locating peg prevents a wrong assembly and gives an accurate position

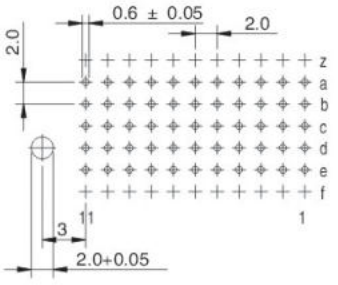
Dimensions



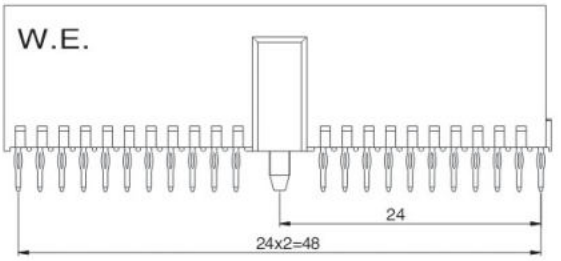


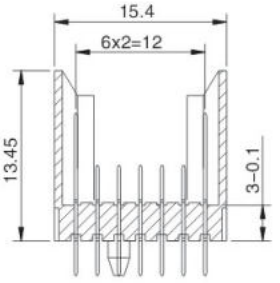
Recommended P.C.B. layout



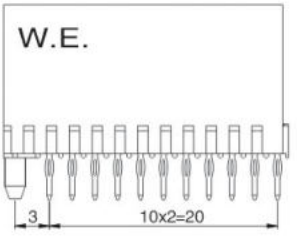


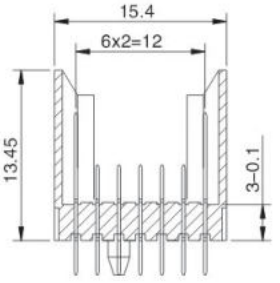
Type A





Type C

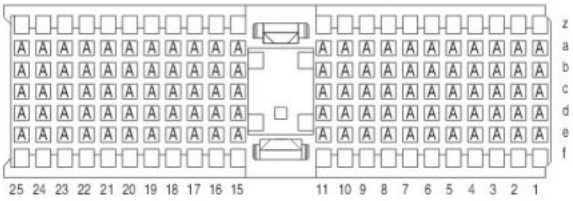
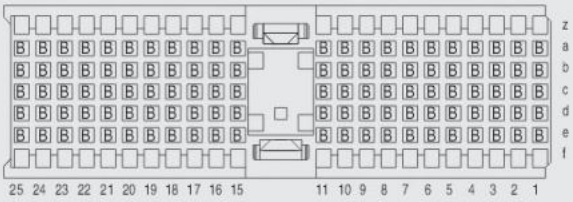
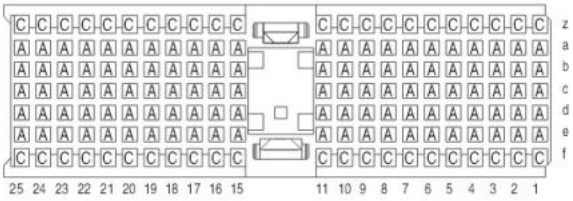
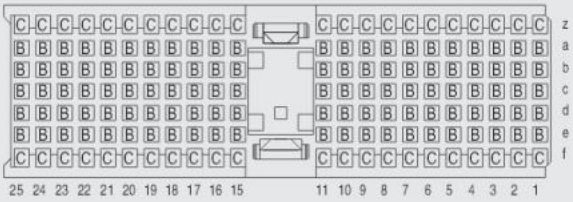




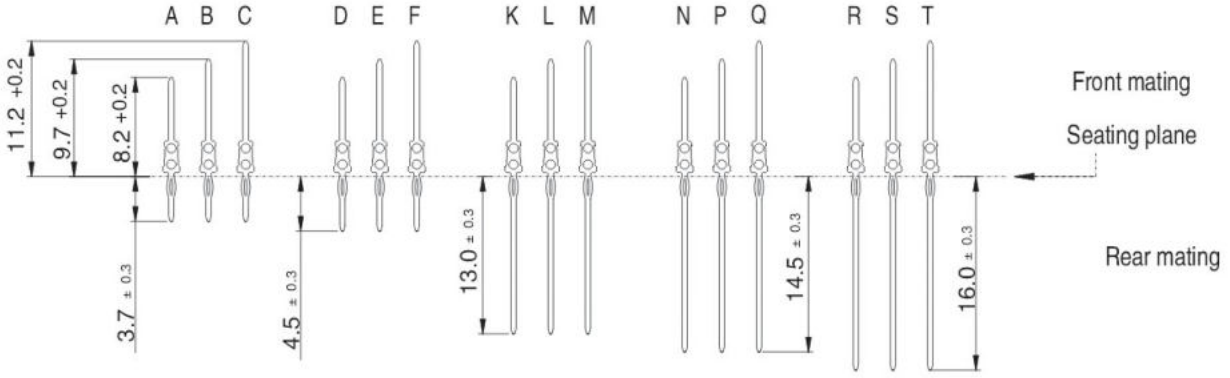
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type A&C Connectors for Fix Boards

Dimensions

Assembly Drawing	Total Number	Row	Type	Part Numbers
	110	z a b c d e f	– A A A A A –	1688H2A1101A–0–30
	110	z a b c d e f	– B B B B B –	1688H2A1101B–0–30
	154	z a b c d e f	C A A A A A C	1688H2A1541A–1–30
	154	z a b c d e f	C B B B B B C	1688H2A1541B–1–30

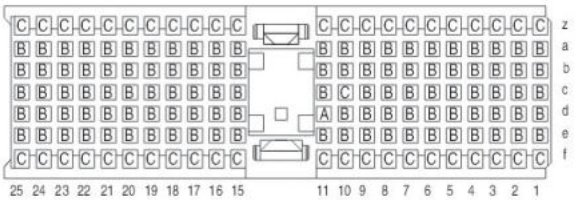
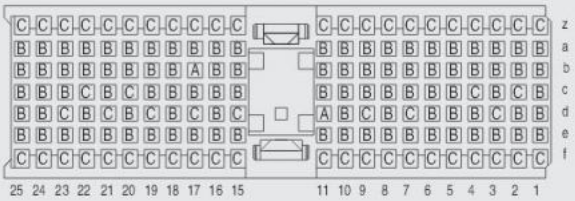
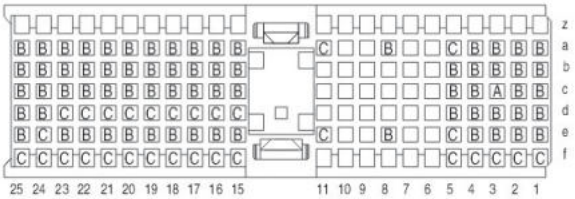
Male Contact Options



Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

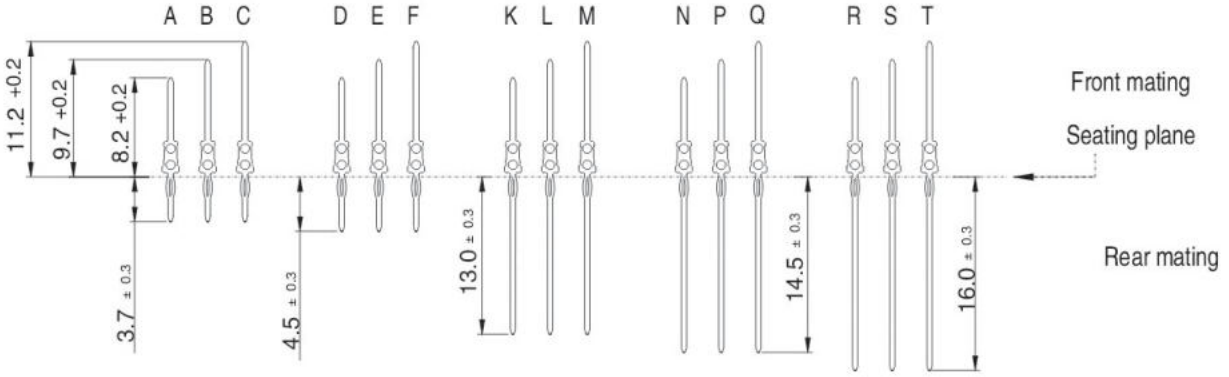
Vertical Male Type A&C Connectors for Fix Boards

Dimensions

Assembly Drawing	Total Number	Row	Type	Part Numbers
Compact PCI 	154	z a b c d e f	C B B * * B C	1688H2A15412-1-30
cPCI Hot Swap 	154	z a b c d e f	C B * * * B C	1688H2A15413-1-30
cPCI Telephony Spec 	100	z a b c d e f	C B * * * B C	1688H2A10016-1-30

* = The row has more than one different length contact in it.

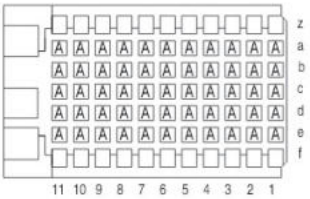
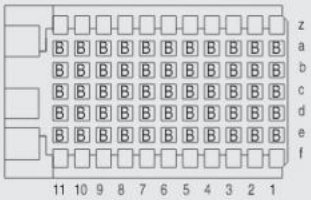
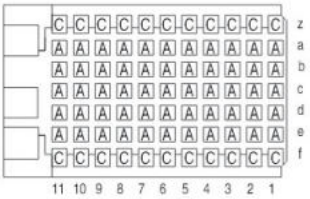
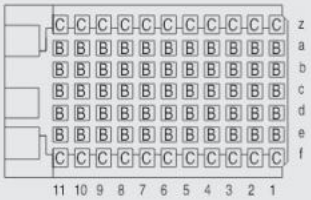
Male Contact Options



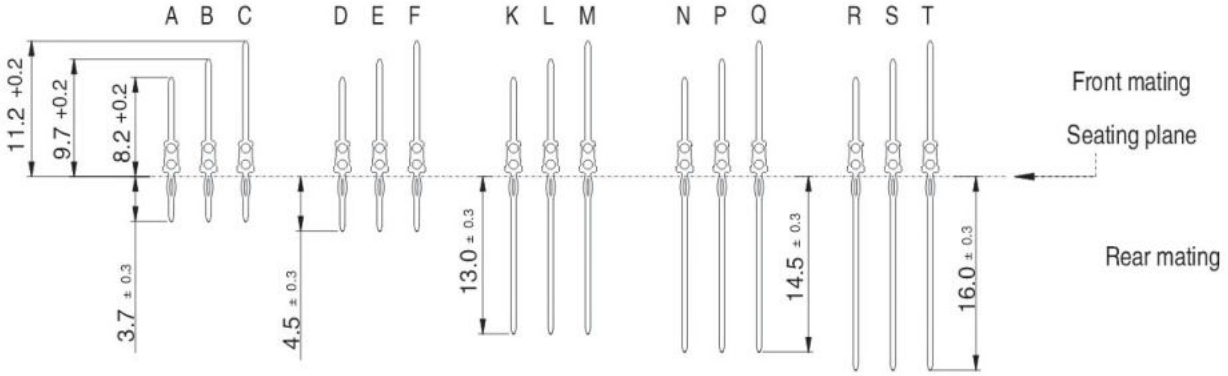
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type A&C Connectors for Fix Boards

Ordering Information

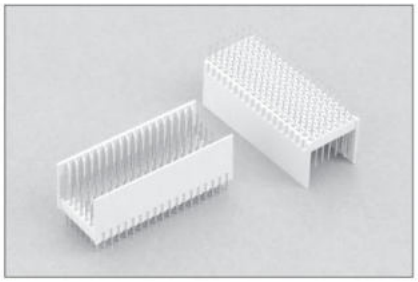
Assembly Drawing	Total Number	Row	Type	Part Numbers
	55	z a b c d e f	– A A A A –	1688H2C551A–0–30
	55	z a b c d e f	– B B B B –	1688H2C551B–0–30
	77	z a b c d e f	C A A A A C	1688H2C771A–1–30
	77	z a b c d e f	C B B B B C	1688H2C771B–1–30

Male Contact Options



Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

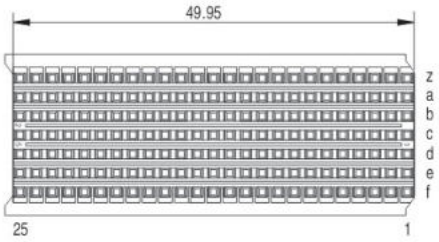
Vertical Male Type B Connectors for Fix Boards



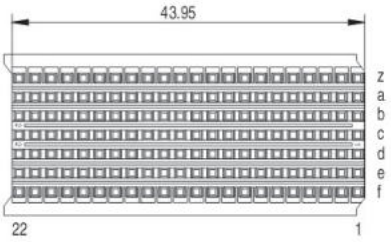
- Type B25 vertical male Connector provides signal contcts and optional shielding contacts respctively in 5+2 row x 25 position configuration.
- Type B22 vertical male Connector provides signal contcts and optional shielding contacts respectively in 5+2 row x 22 position configuration.
- Type B19 vertical male Connector provides signal contcts and optional shielding contacts respctively in 5+2 row x 19 position configuration.
- All are end to end stackable withont change in contact pitch.

Dimensions

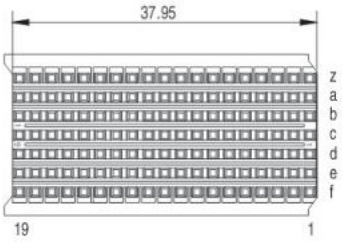
Type B25

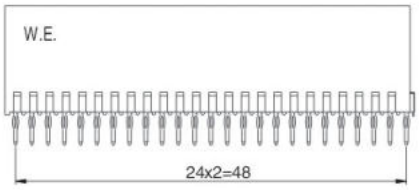


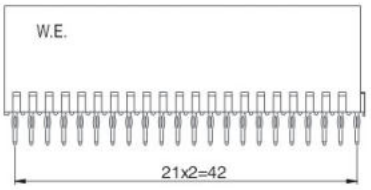
Type B22

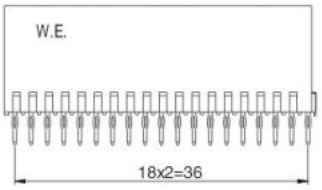


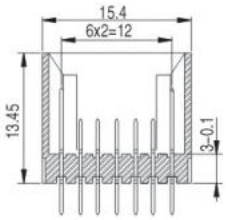
Type B19

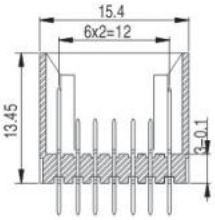


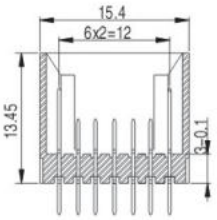




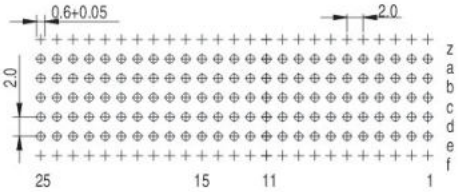


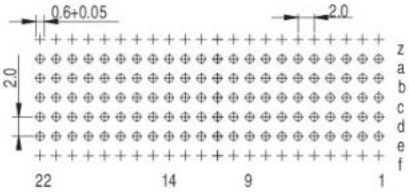


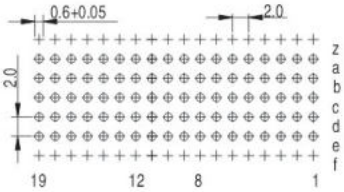




Recommended P.C.B. Layout



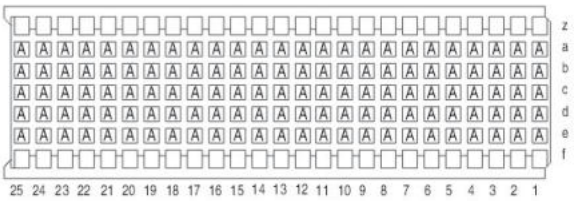
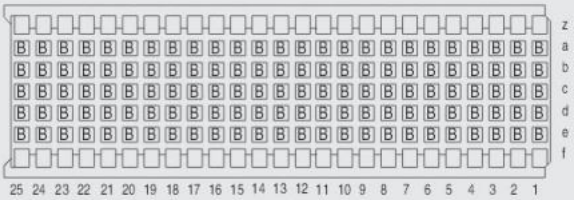
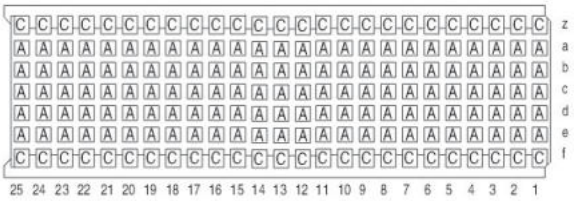
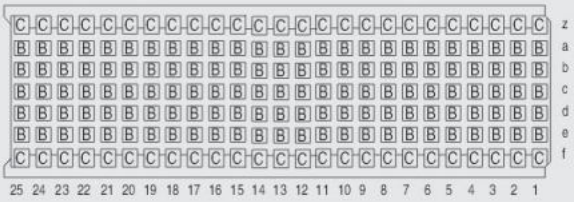




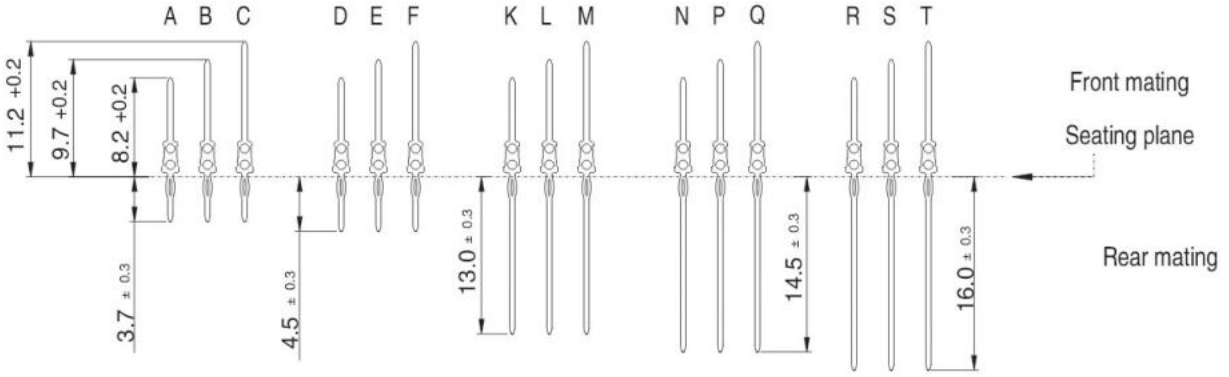
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type B Connectors for Fix Boards

Dimensions(Type B25)

Assembly Drawing	Total Number	Row	Type	Part Numbers
	125	z a b c d e f	– A A A A A –	1688H2B51251A–0–30
	125	z a b c d e f	– B B B B B –	1688H2B51251B–0–30
	175	z a b c d e f	C A A A A A C	1688H2B51751A–1–30
	175	z a b c d e f	C B B B B B C	1688H2B51751B–1–30

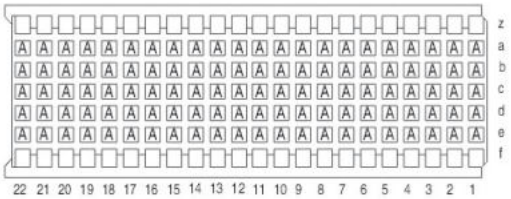
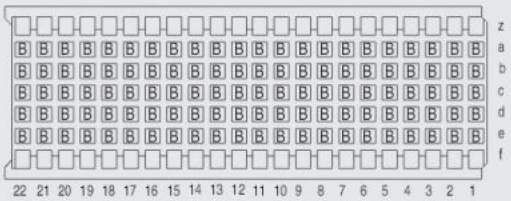
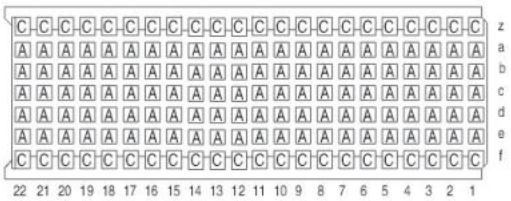
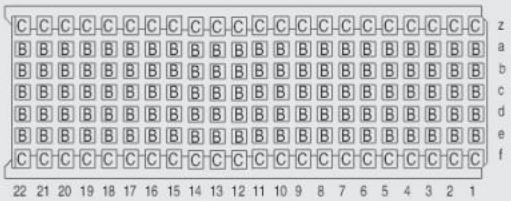
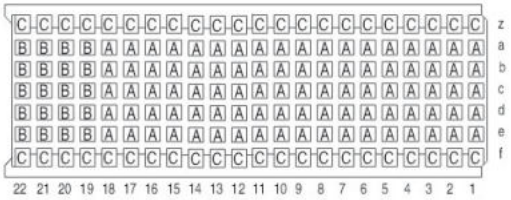
Male Contact Options



Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type B Connectors for Fix Boards

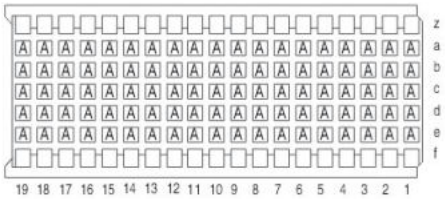
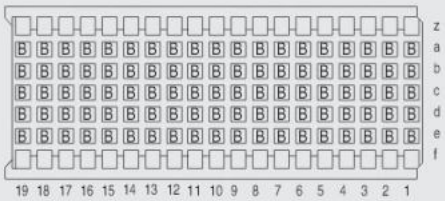
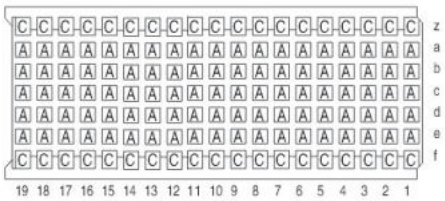
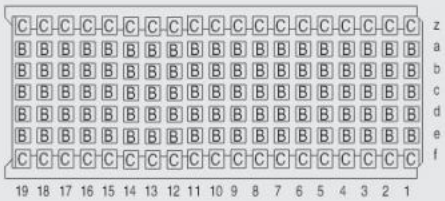
Dimensions(Type B22)

Assembly Drawing	Total Number	Row	Type	Part Numbers
	110	z a b c d e f	- A A A A A -	1688H2B21101A-0-30
	110	z a b c d e f	- B B B B B -	1688H2B21101B-0-30
	154	z a b c d e f	C A A A A A C	1688H2B21541A-1-30
	154	z a b c d e f	C B B B B B C	1688H2B21541B-1-30
cPCI Telephony Spec 	154	z a b c d e f	C * * * * * C	1688H2B215415-1-30

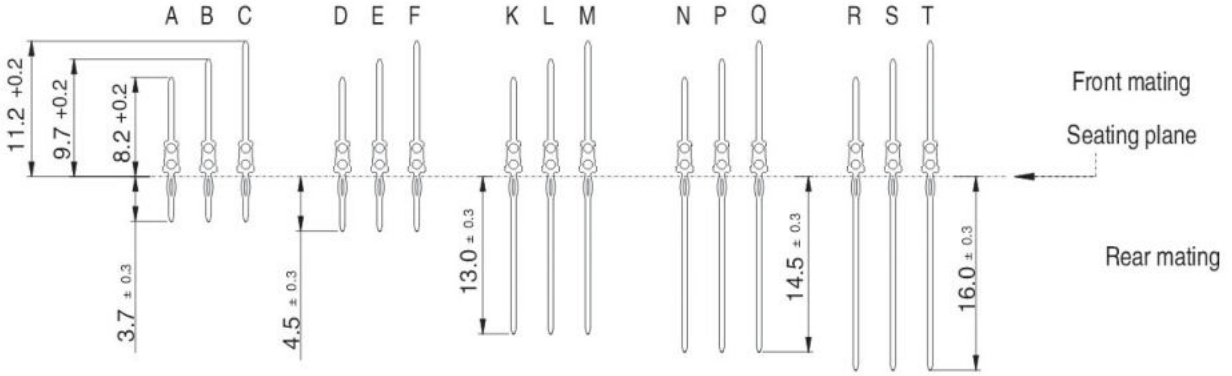
*=The row has more than one different length contact in it.

Vertical Male Type B Connectors for Fix Boards

Dimensions(Type B19)

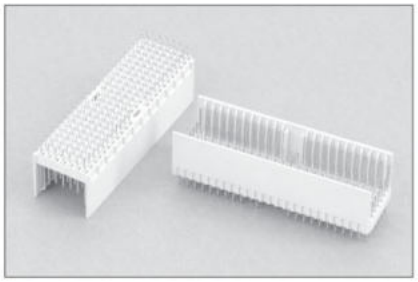
Assembly Drawing	Total Number	Row	Type	Part Numbers
	95	z a b c d e f	– A A A A A –	1688H2B1951A–0–30
	95	z a b c d e f	– B B B B B –	1688H2B1951B–0–30
	133	z a b c d e f	C A A A A A C	1688H2B11331A–1–30
	133	z a b c d e f	C B B B B B C	1688H2B11331B–1–30

Male Contact Options



Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

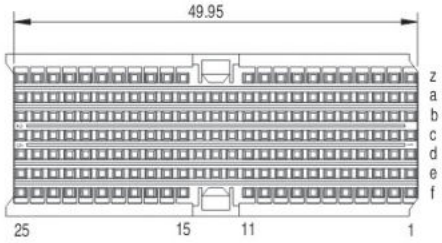
Vertical Male connectors Type AB for Fix Bcakpnes



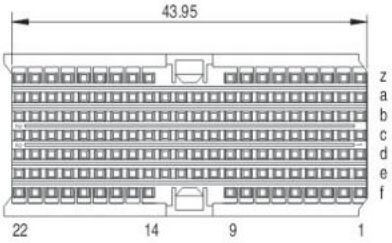
- The type AB vertical male Connector provies 125 signal contcts and 44 ground shield contacts in 5+2 row 25x25 position,fully loaded configuration.This connertor is used in P1 and P4 positions of a compact PCL backplane.With 15 different standard pin lengths to choose from,this is one of the most versatile connectors available. The connector is designed for gas tight pressfit installation.The type AB male has an uninterrupted pin field with either type A, C, L, M or N connestoes.

Dimensions

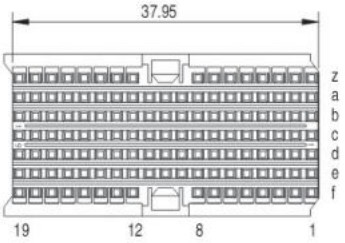
Type AB25

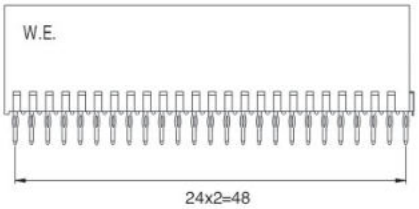


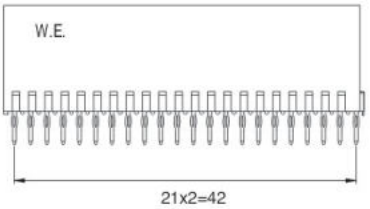
Type AB22

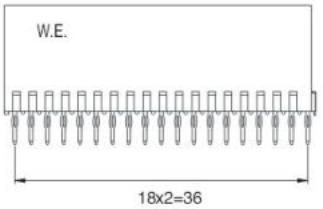


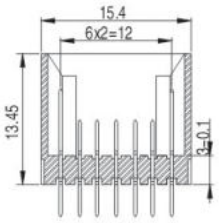
Type AB19

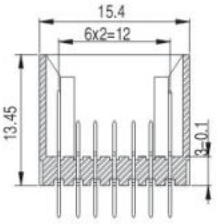


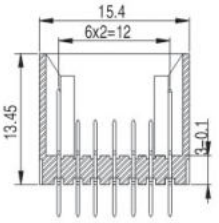




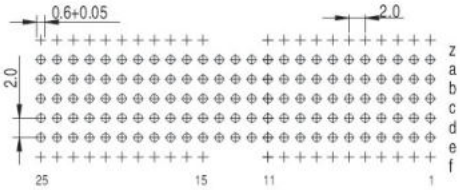


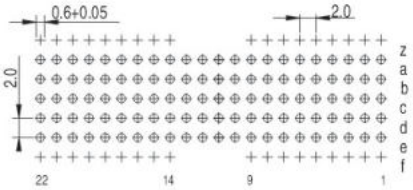


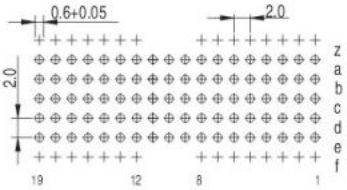




Recommended P.C.B. Layout



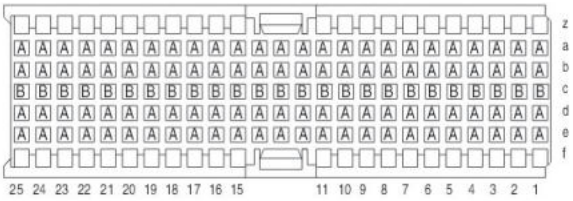
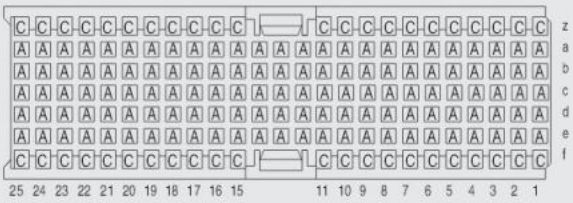
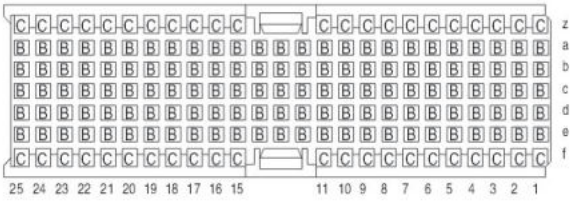
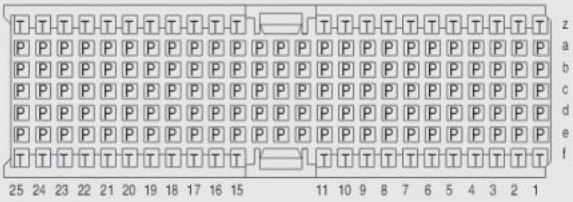




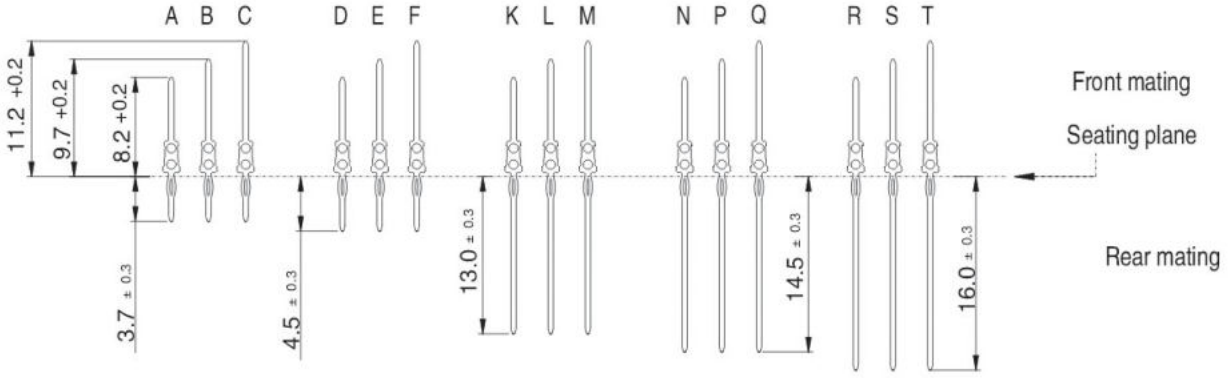
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type AB Connectors for Fix Bcakplanes

Dimensions(TypeAB 25)

Assembly Drawing	Total Number	Row	Type	Part Numbers
	125	z a b c d e f	- A A B A A -	1688H2AB512517-0-30
	169	z a b c d e f	C A A A A A C	1688H2AB5169A-1-30
	169	z a b c d e f	C B B B B B C	1688H2AB5169B-1-30
	169	c b b b b b c	T P P P P P T	1688H2AB5169P-1-30

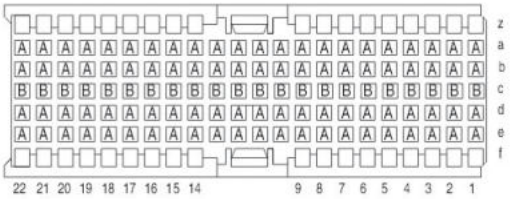
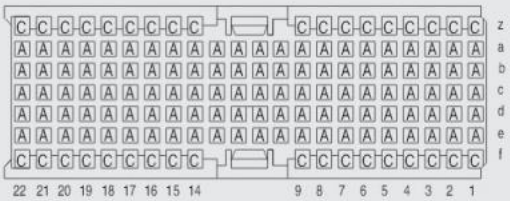
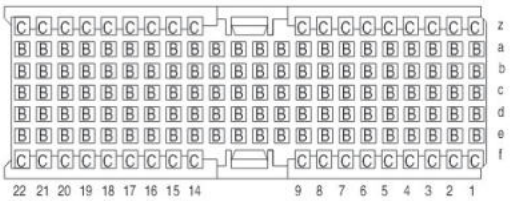
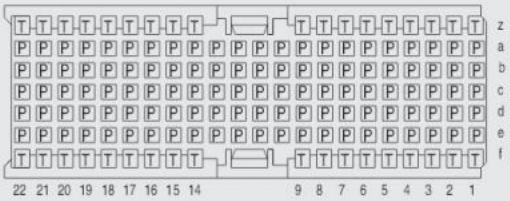
Male Contact Options



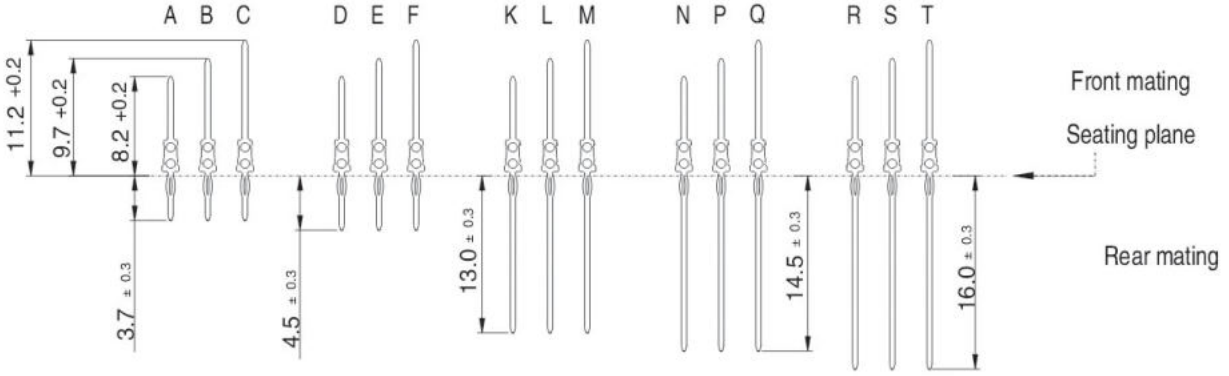
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Type AB Connectors for Fix Bcakplanes

Dimensions(TypeAB 22)

Assembly Drawing	Total Number	Row	Type	Part Numbers
	110	z a b c d e f	- A A B A A -	1688H2AB211017-0-30
	146	z a b c d e f	C A A A A A C	1688H2AB2146A-1-30
	146	z a b c d e f	C B B B B B C	1688H2AB2146B-1-30
	146	c b b b b b c	T P P P P P T	1688H2AB2146P-1-30

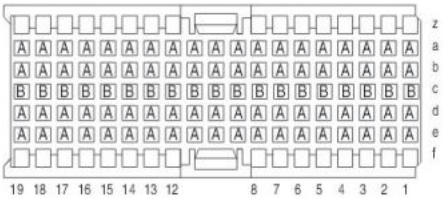
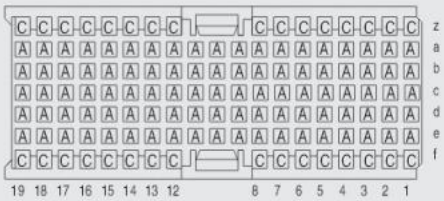
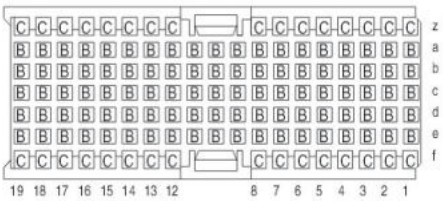
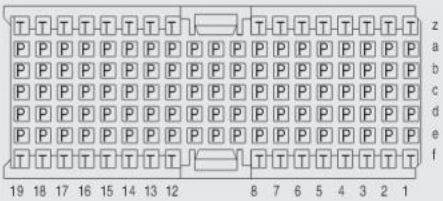
Male Contact Options



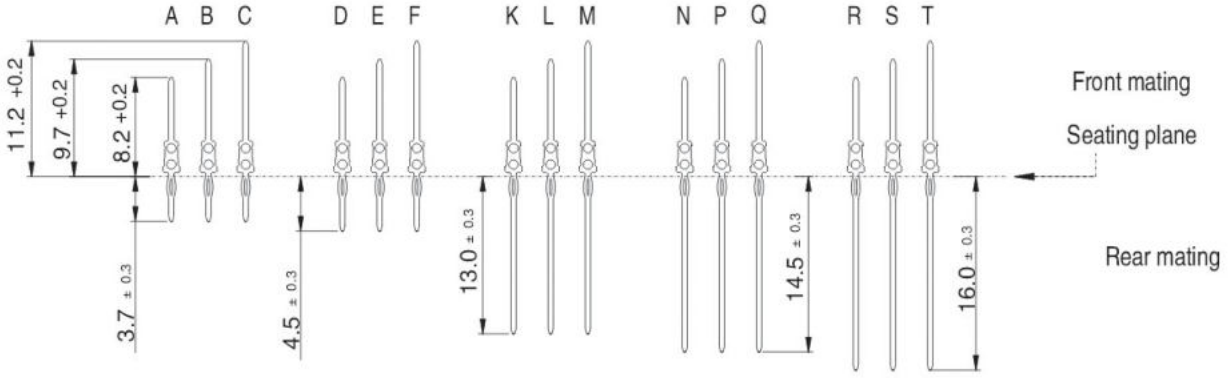
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Male Connectors Type AB for Fix Bcakplanes

Dimensions(TypeAB 19)

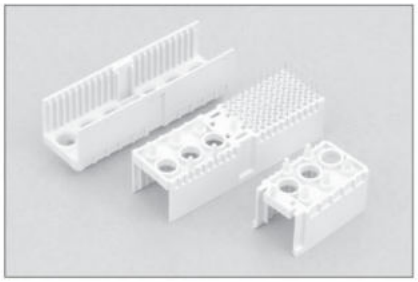
Assembly Drawing	Total Number	Row	Type	Part Numbers
	95	z a b c d e f	- A A B A A -	1688H2AB19517-0-30
	127	z a b c d e f	C A A A A A C	1688H2AB1127A-1-30
	127	z a b c d e f	C B B B B B C	1688H2AB1127B-1-30
	127	c b b b b b c	T P P P P P T	1688H2AB1127P-1-30

Male Contact Options



Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

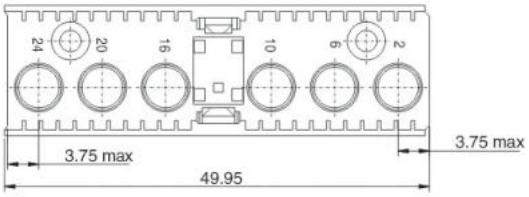
Vertical Male Type L/M/N Connectors for Fix Boards

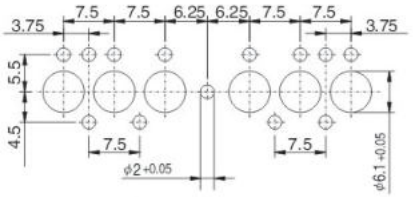


- These connectors have 3 or 6 cavities for high current,coaxial or fiber optic contacts.The MPC on type L and M prouides aligiment guildes and accepts optional coding keys. The half-size type N also provides addition guidance when used on the end of a card slot.

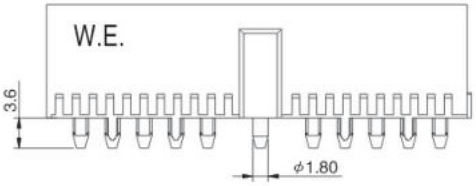
Dimensions

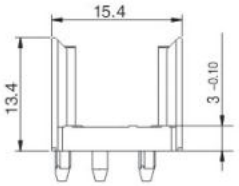
Type L



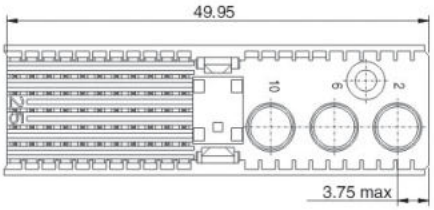


Recommended P.C.B. layout

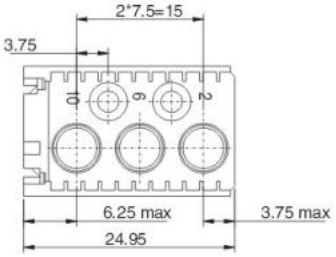


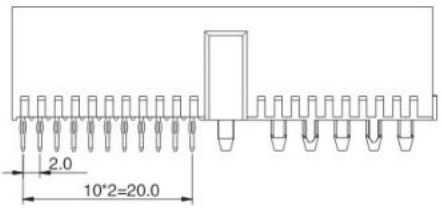


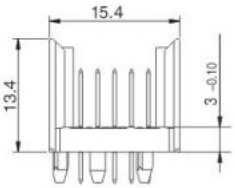
Type M

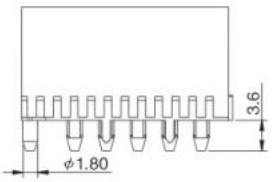


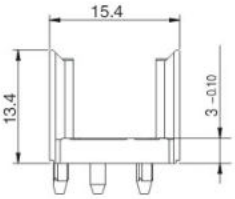
Type N

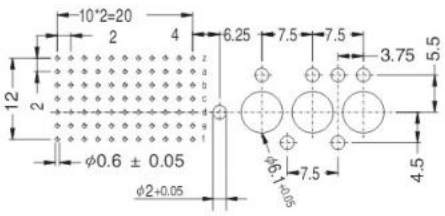


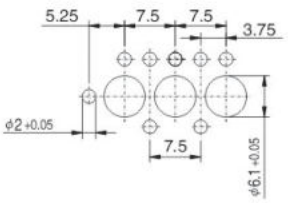






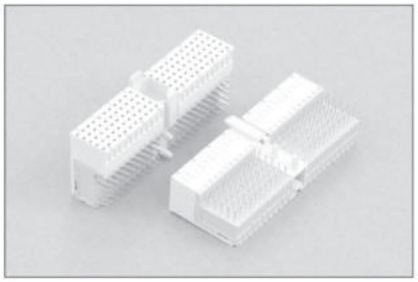






Dimensions shown are for reference only,All dimensions millimeters unless othrwise specified.

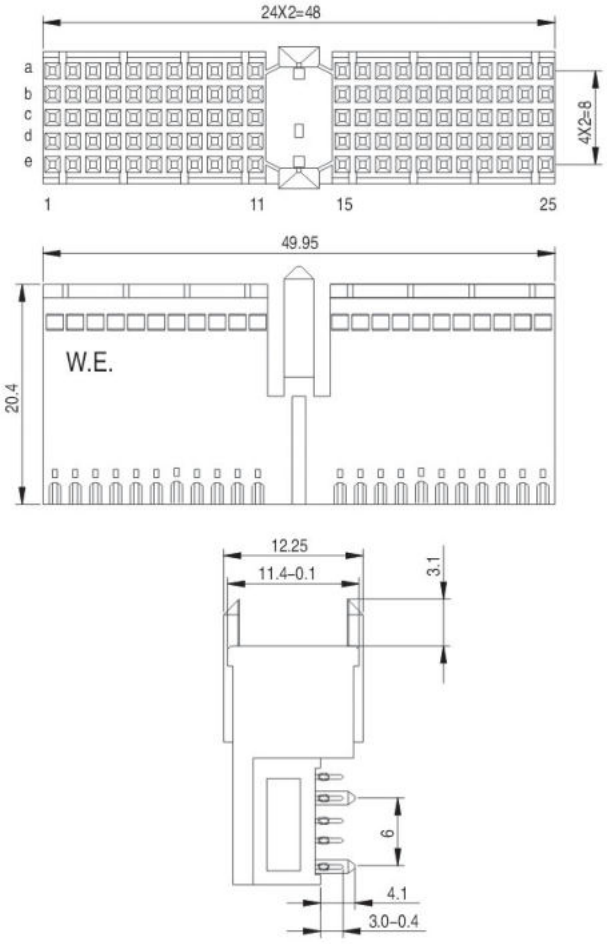
Right Angle Female Type A&C Connectors for Free Boards



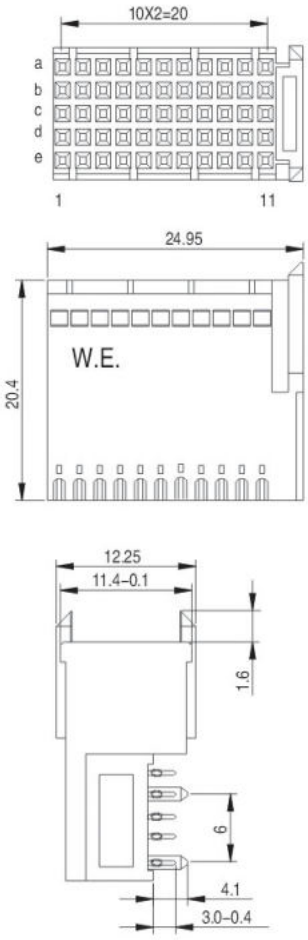
- Type A ringle female connector procides 110 contacts in a 5 row x 25 position fully loaded configuration The MPC provides alignment guide and accepts optional coding keys. This connector is used in the JI and J4 position of the compact PCI daughter board. Right angle female half-size type C connector is polarized and procides 55 signal contcts in 5 ROW X 11 position fully loaded configuration.
- Optional pre-assembled upper and lower ground return shield are also provided or could be ordered separately.

Dimensions

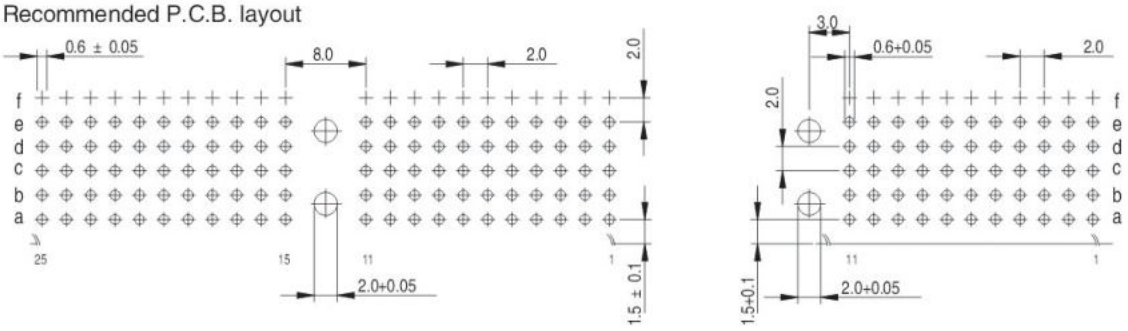
Type A



Type C

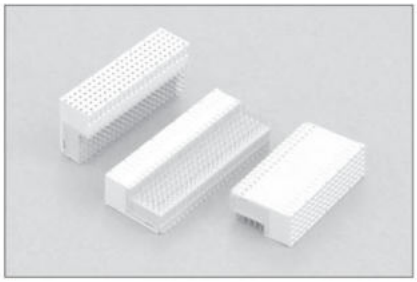


Recommended P.C.B. layout



Dimensions shown are for reference only,All dimensions millimeters unless othrwise specified.

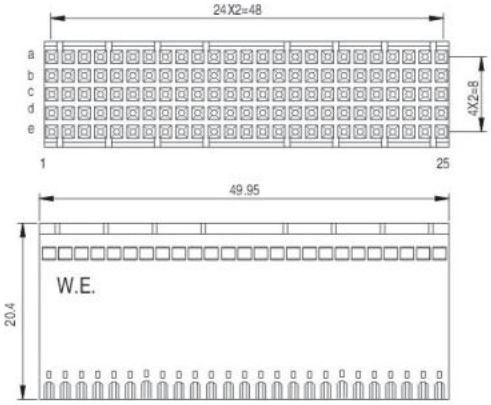
Right Angle Female Type B Connectors for Free Boards



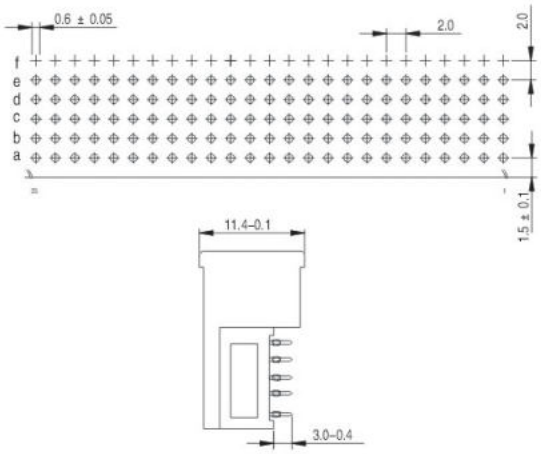
- Right angle female type B connector provides 125 signal contacts in a 5 row x 25 position fully loaded configuration. The type B connector provides 110 signal contacts in a 5raw x 22 position fully loaded configurtion. The 22 position one is used in the J1 and J5 location of the compact PCI daughter card.
- The type B connector provides 950 signal contacts in a 5 row x 19 position fully loaded confihuration. The 19 position one is used in the J3 location of the compact PCI daughter card.
  Optional pre-assembled upper and lower ground return shieids are also provided or could be ordered separately.

Dimensions

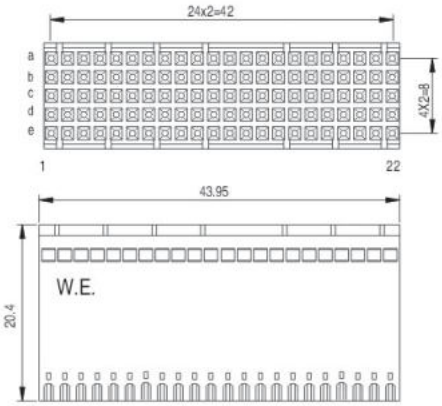
Type B25

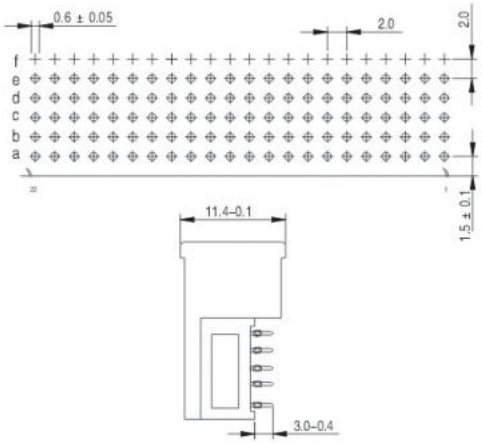


Recommended P.C.B. layout

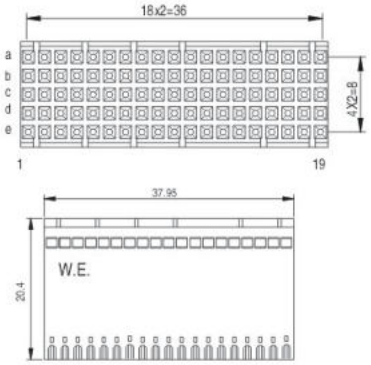


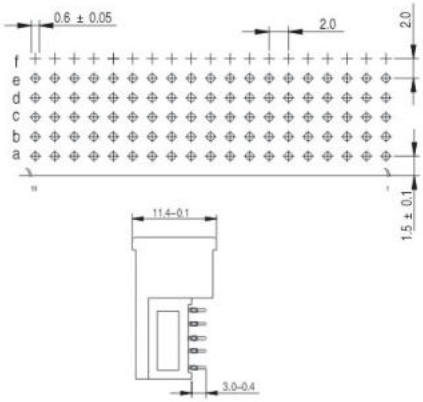
Type B22





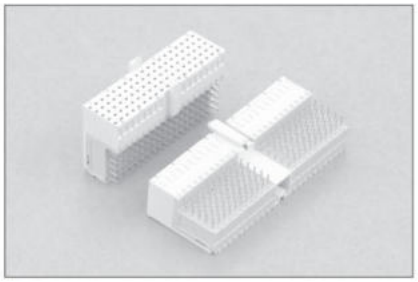
Type B19





Dimensions shown are for reference only,All dimensions millimeters unless othrwise specified.

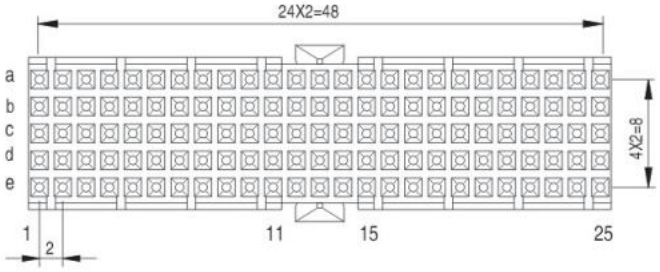
Right Angle Female Connectors Type AB for Daughter Cards

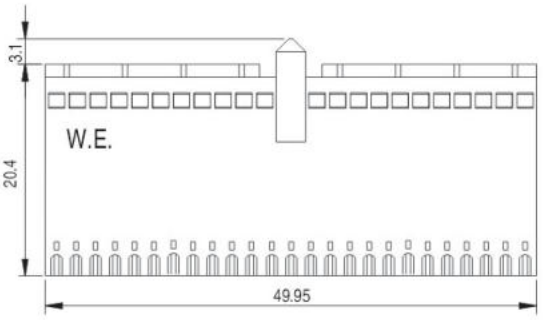


- The AB female connector provies 125 contacts in a 5 row x25 fully loaded configuration,110 contacts in a 5 row x 22 position fully loaded configuration or 95 pins in s 5 row x 19 position configuration.The 19 position connector is used in the rj3 location and the 22 position connector is used in the rj2 and rj5 locations of the Compact PCI rear transition card.The connector is designed for gas tight,pressfit installation and is provided in two different configur-ations:with integrated ground return shidls.Lower groud rerum shields are available separately.The AB female connector has an uninterrupted pin field with no multifunction cavity but does have integral pre-alignment guides .This connector can be used alone or in conjunction with either a type A,B or C connector. This connector will provide the necessary alignment for rear transition applications.

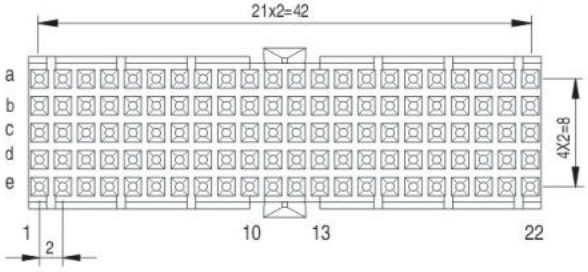
Dimensions

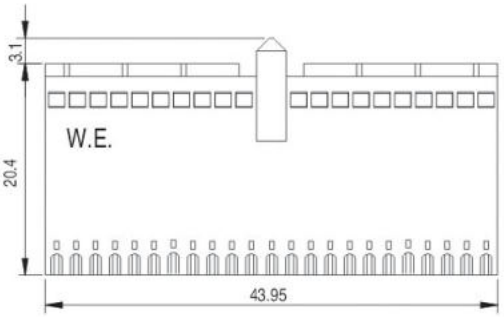
Type AB25(125 Pins)



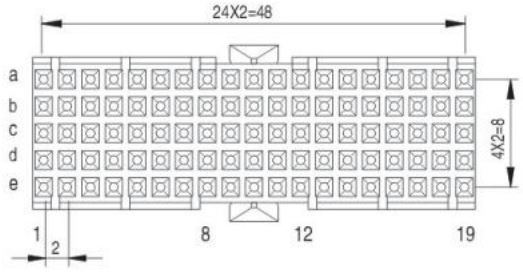


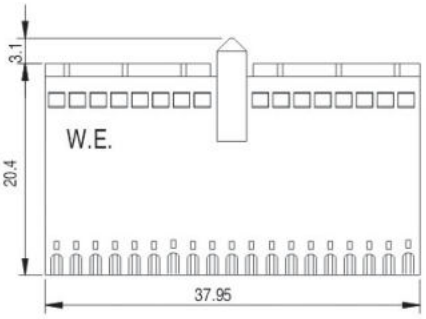
Type AB22(110 Pins)



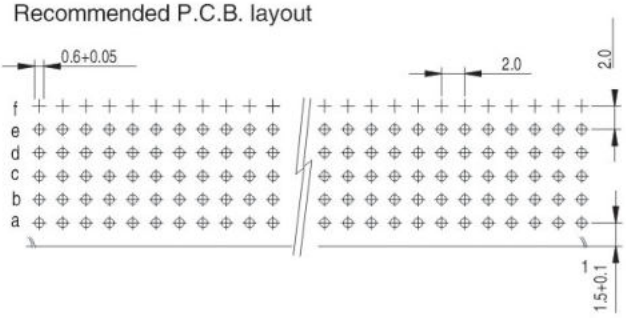


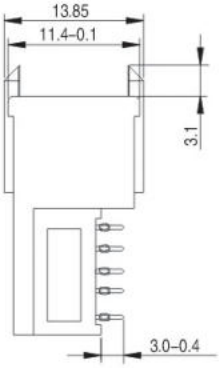
Type AB19(95 Pins)





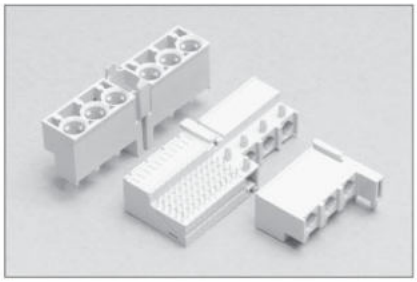
Recommended P.C.B. layout





Dimensions shown are for reference only,All dimensions millimeters unless othrwise specified.

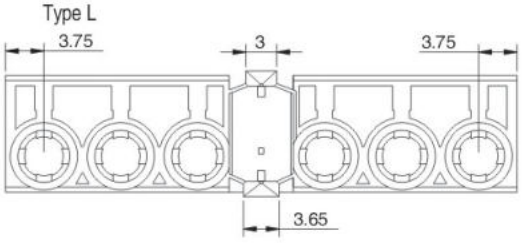
Right Angle Female Type L/M/N Connectors for Free Boards



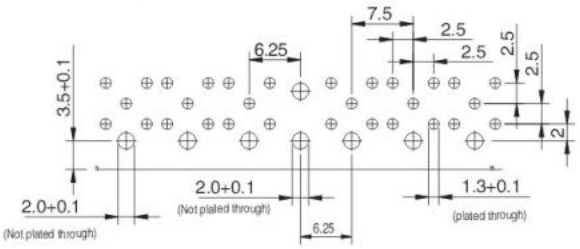
- These connectors have 3 or 6 cavities for high current, coaxial or fiber optic contcts. The MPC on type L and M privides alignment guides and accepts optional coding keys. The half-size type N is also provided with guiding and polarized pegs.

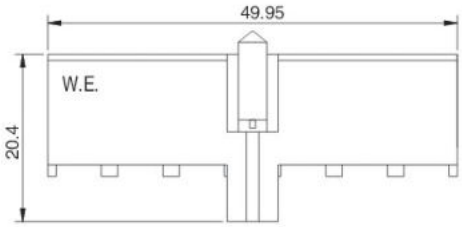
Dimensions

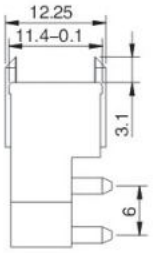
Type L



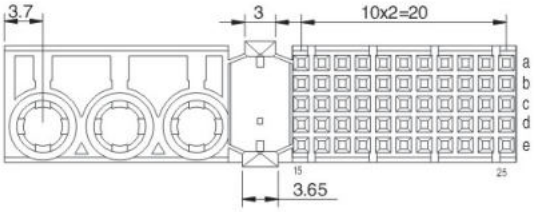
Recommended P.C.B. layout

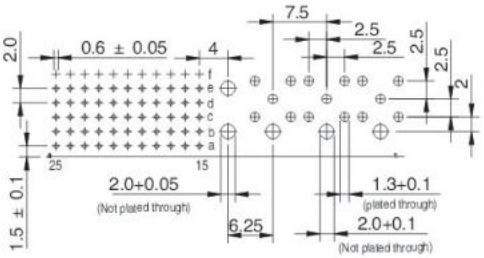


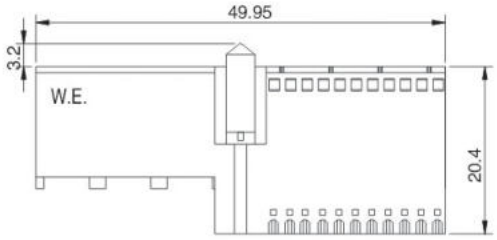


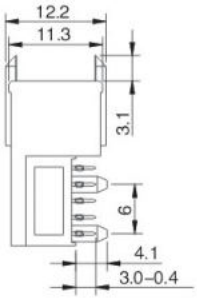


Type M

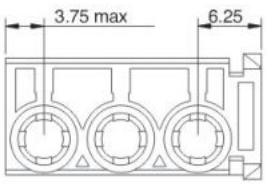


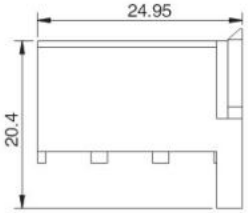


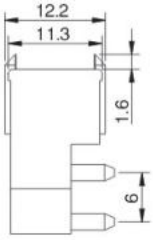


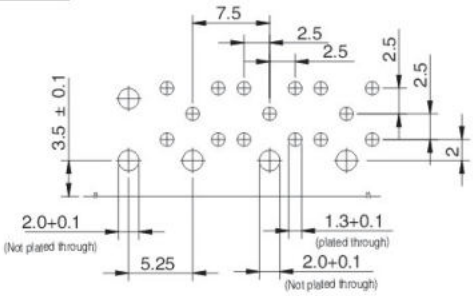


Type N



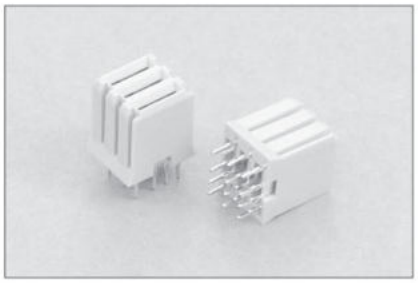






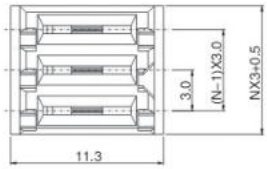
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Vertical Female Power Modules For Backplanes

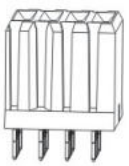


The female connector for backplanes provides a reliable, closed entry dual beam connection.This power connector is designed to be compatible with other popular 2mm HM connectors and the DIN 41612 family of connectors. When used on a backplane this female receptacle connector eliminates any possibility of shorting power pins. This connector is designed to meet the IEC950 safety requirements for finger probe protection. This module provides three female contacts (7.8amperes each)in a reliable press fit configuration. The pressfit hole requirements are the same as the rest of the signal connector family.

Dimensional drawings and board hole pattern

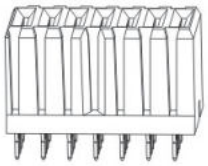


3PIN contacts

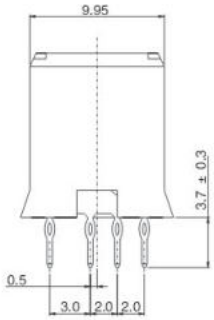


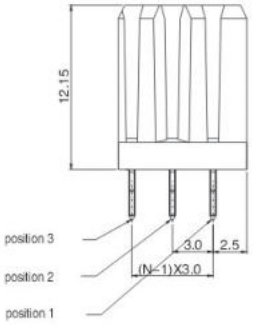
4PIN contacts

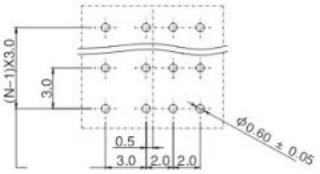
5PIN contacts



7PIN contacts







Recomended pc board hole layout

Diameter of finished plated-through hole.
Φ0.7 ± 0.02 Diameter of drilled hole.

Ordering Information

1688 H 3P — 3 — 30

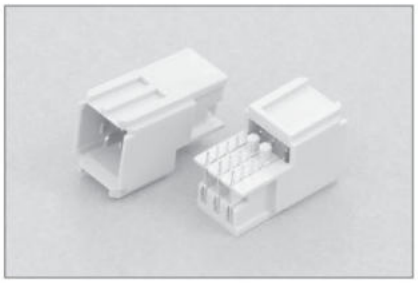
- 1688 → Series No.
- H → 2.0mm Hard metric
- 3P → Female Power module
- 3 → Nr.of contact
  - 3: 3PIN contacts
  - 4: 4PIN contacts
  - 5: 5PIN contacts
  - 7: 7PIN contacts
- 30 → Contact finish

Contact finish		
code	Contact area	tails
30	30U"	Tin
40	40U"	Tin
50	50U"	Tin

* 3 Positions initial P/N: 1688H3P-30

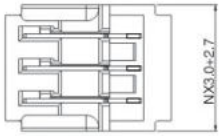
Dimensions shown are for reference purpose only,All dimensions are in millimeters unless othrwise specified.

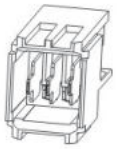
Right Angle Male Power Modules For Daughter Cards



The 2mm HM power connector is used in conjunction with 2mm HM signal connectors. It is also compatible with other popular 2mm HM connectors and the DIN 41612 family of connectors. The right angle male connector provides up to three power contacts (9 amperes(20 ℃ each). The male contact are available in three heights for early mate, late break hot swap applications. This connector compliments the entry female receptacle on the backplane and the right angle male header on the daughter card. This connector is designed to meet the IEC950 safety requirements for finger probe protection The connector offers convenient pressfit assembly with inexpensive flat rock tooling. The pressfit hole requirements are the same as for the rest of the 2mm HM family.

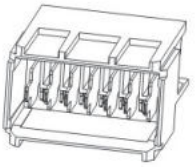
Dimensional drawings and board hole pattern

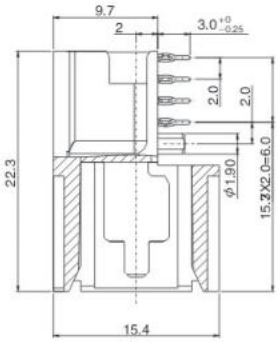


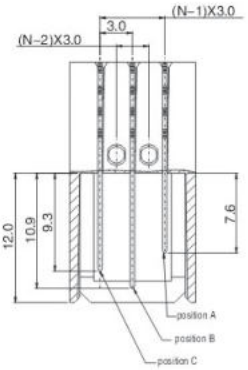

3PIN contacts

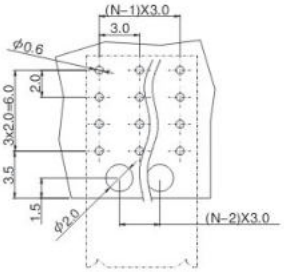
4PIN contacts

5PIN contacts


7PIN contacts







Recomended pc board hole layout

Diameter of finished plated−through hole
ϕ0.7 ± 0.02Diameter of drilled hole.

Contact finish		
code	Contact area	tails
30	30U"	Tin
40	40U"	Tin
50	50U"	Tin

Ordering Information

1688 H 4P — 3 — 1 — 30

- 1688 → Series No.
- H → 2.0mm Hard metric
- 4P → Male Power module
- 3 → Nr.of contact
  - 3: 3PIN contacts
  - 4: 4PIN contacts
  - 5: 5PIN contacts
  - 7: 7PIN contacts
- 1 → Blade length
- 30 → Contact finish

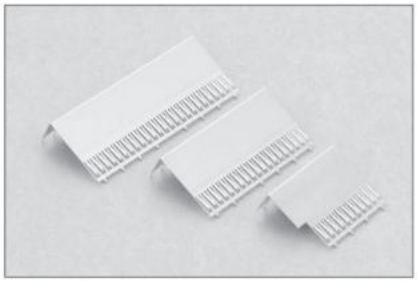
code	Position A	Position B	Position C	code	Position A	Position B	Position C
1	10.9	10.9	10.9	4	9.30	10.9	7.60
2	10.9	9.30	10.9	5	9.30	7.60	9.30
3	9.30	10.9	9.30				
3 Positions Blade length							

code	Position A	Position B	Position C	Position D	Position E	Position F	Position G
1							
2							
4,5,7 Positions (Customers fill Blade length)							

* 3 Positions initial P/N: 1688H4P1−30

Dimensions shown are for reference purpose only,All dimensions are in millimeters unless othrwise specified.

Shielding Covers

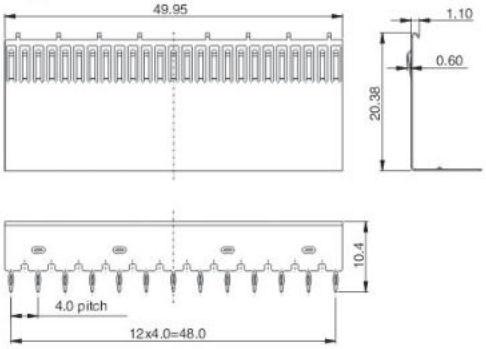


- Upper ground return shield could be pre-instslled to the female connectors,the lower shields are provided and assembled separately after installing of the connectors onto the printed circuit board as required.Both the upper and lower shielding covers could bd ordered sepatately.

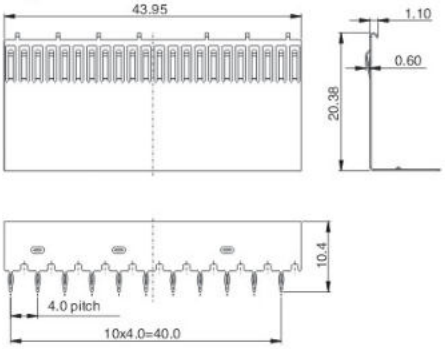
Dimensions

Upper Shields

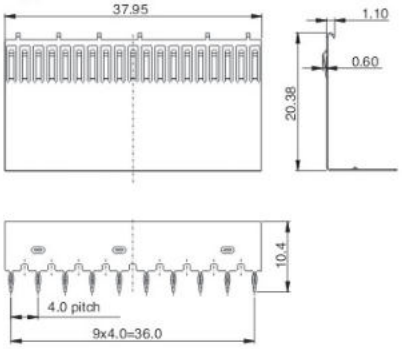
Type B25



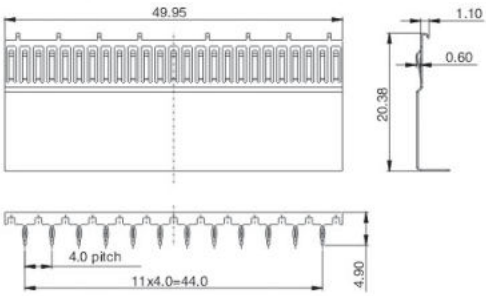
Type B22

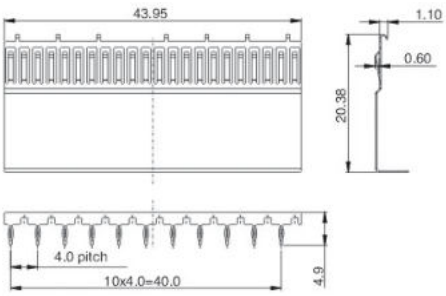


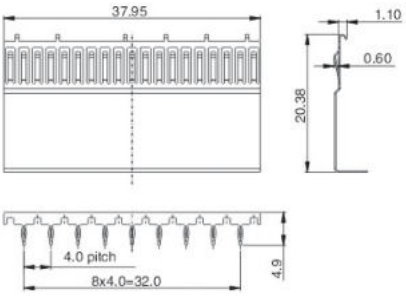
Type B19



Lower Shields

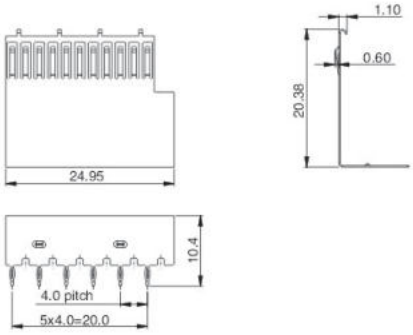






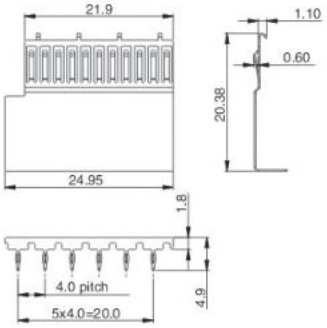
Upper Shields

Type C



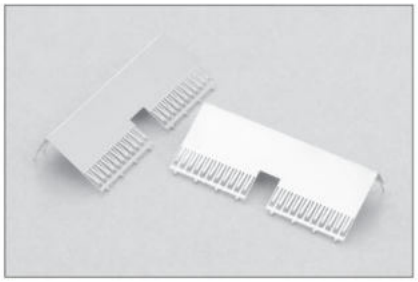
Lower Shields

Type C



Dimensions shown are for reference purpose only,All dimensions are in millimeters unless otherwise specified.

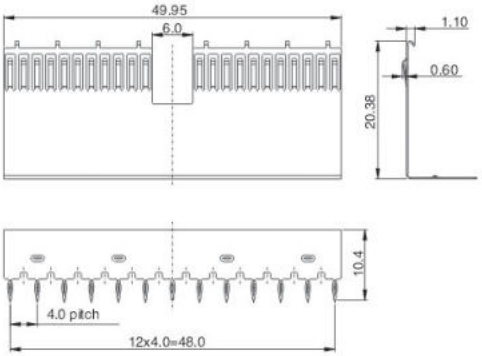
Shielding Covers



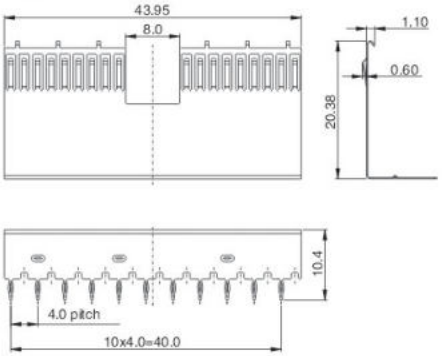
- Upper ground return shield could be pre-instslled to the female connectors,the lower shields are provided and assembled separately after installing of the connectors onto the printed circuit board as required.Both the upper and lower shielding covers could bd ordered sepatately.

Dimensions

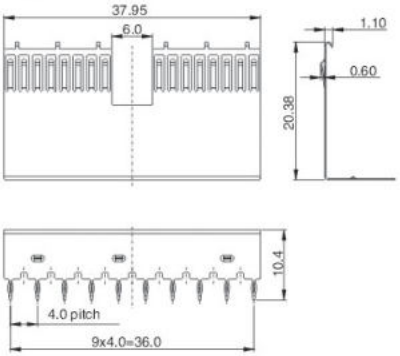
Type A & AB25



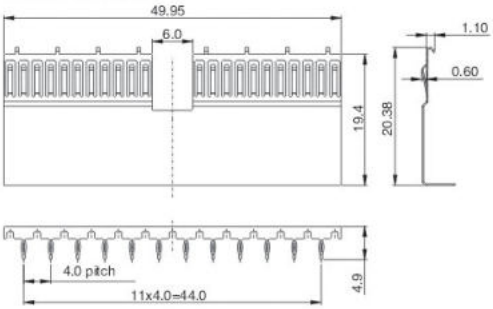
Type AB22

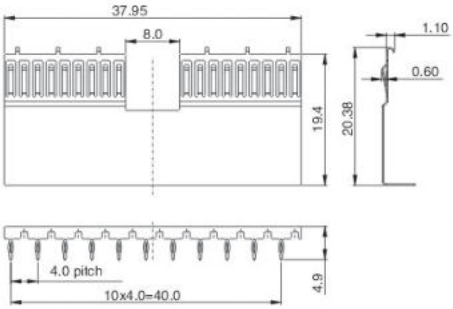


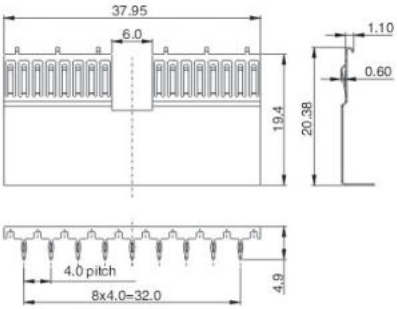
Type AB19



Lower Shields







Ordering Information

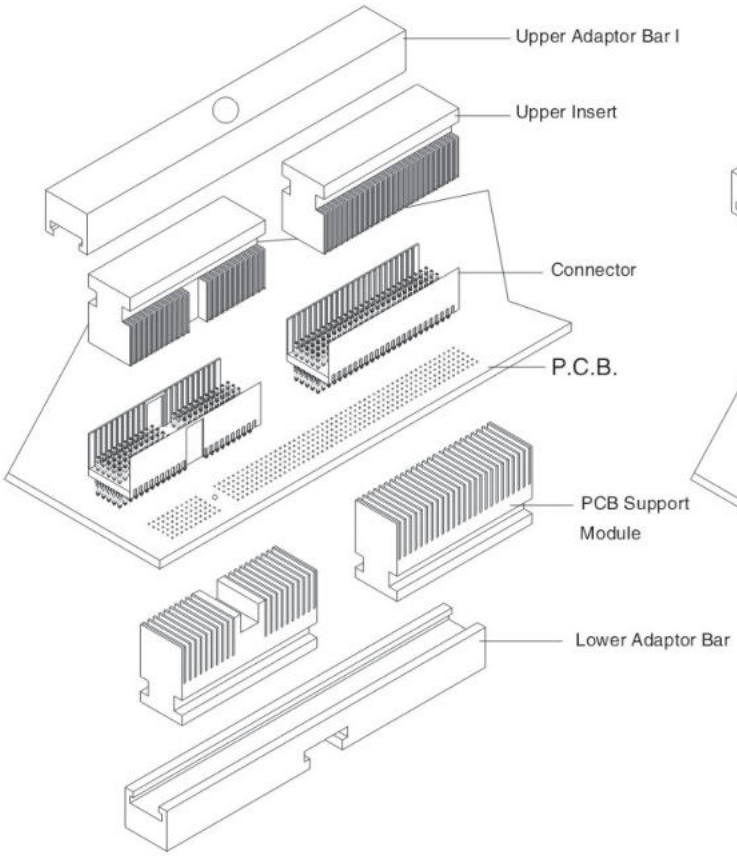
M AB 25 1 082

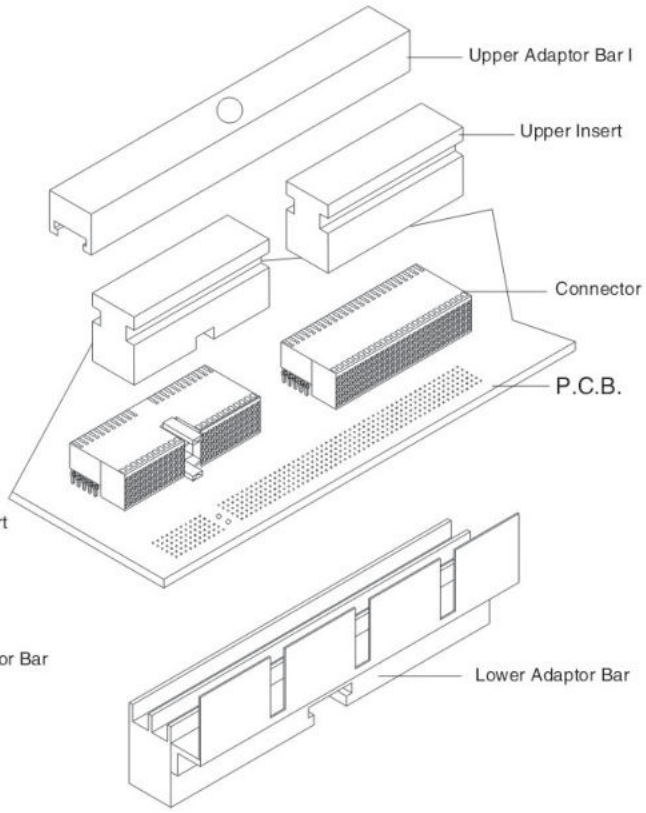
- M → Shields cover
- AB → Type A,B,C & AB
- 25 → 25: Type A,AB-25 & B-25; 22: Type B-22; 19: Type B-19; 11: Type C
- 1 → 1: Upper Shield; 2: Lower Shield
- 082 → 082: Selective PdNi 08u"+Au 2u" plated; 282: Selective PdNi 28u"+Au 2u" plated; 610: 10U" selective gold plated; 630: 30U" selective gold plated

Dimensions shown are for reference purpose only,All dimensions are in millimeters unless otherwise specified.

Application Toolings

Male Connector Insertion





For Compact PCI Application

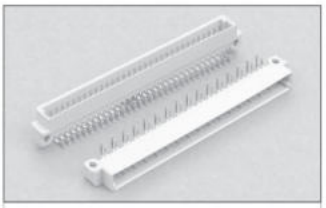
Orering Information

Description	Tool Part Number
Upper Adaptor Bar I	MHUAB I
Upper Insert – Type A	MHUIA
Upper Insert – Type B25	MHUIB25
Upper Insert – Type B22	MHUIB22
Upper Insert – Type B19	MHUIB19
Upper Insert – Type C	MHUIC
PCB Support Module – Type A	MHPSMA
PCB Support Module – Type B25	MHPSMB25
PCB Support Module – Type B22	MHPSMB22
PCB Support Module – Type B19	MHPSMB19
PCB Support Module – Type C	MHPSMC
Lower Adaptor Bar	MHLAB

For Compact PCI Application

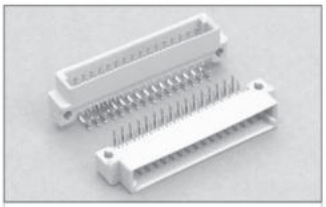
Orering Information

Description	Tool Part Number
Upper Adaptor Bar I	FHUAB I
Upper Insert – Type A	FHUIA
Upper Insert – Type B25	FHUIB25
Upper Insert – Type B22	FHUIB22
Upper Insert – Type B19	FHUIB19
Upper Insert – Type C	FHUIC
Lower Adaptor Bar	FHLB



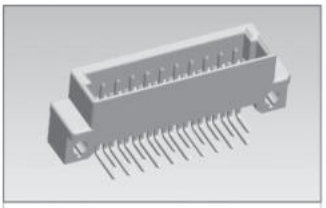
Right Angle Male Type B Connectors 64 Positions

Page52



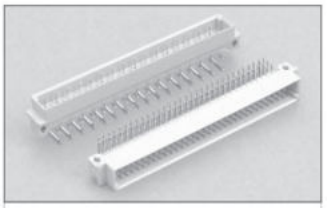
Right Angle Male Type Half B Connectors 32 Positions

Page53



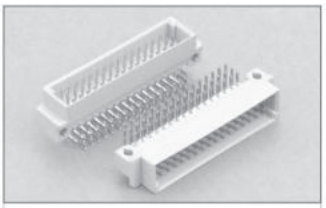
Right Angle Male Type 1/3B Connectors 20 Positions

Page54



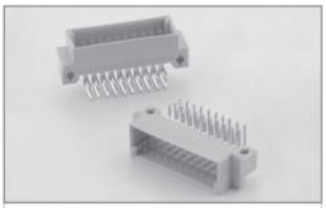
Right Angle Male Type C Connectors 96 Positions

Page55



Right Angle Male Type Half C Connectors 48 Positions

Page56



Right Angle Male Type 1/3 C Connectors 30 Positions

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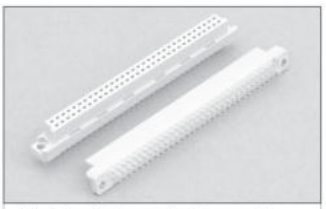
Right Angle Male Type C Connectors 128 Positions

Page58

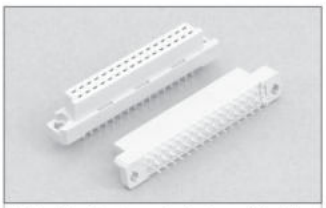
Right Angle Male Type C Connectors 150 Positions

Page59



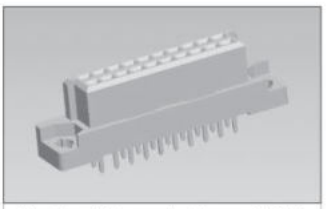
Vertical Female Type B Solder Connectors 64 Positions

Page60



Vertical Female Type Half B Solder Connectors 32 Positions

Page61



Vertical Female Type 1/3B Solder Connectors 20 Positions

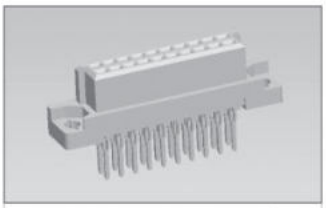
Page62

Vertical Female Type B Compliant Press–Fit Connectors 64 Positions

Page63

Vertical Female Type Half B Compliant Press–Fit Connectors 32 Positions

Page64

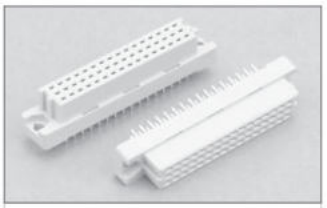


Vertical Female Type 1/3B Compliant Press–Fit Connectors 20 Positions

Page65

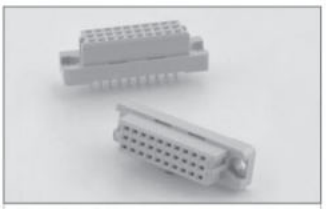
Vertical Female Type C Solder Connectors 96 Positions

Page66



Vertical Female Type Half C Solder Connectors 48 Positions

Page67



Vertical Female Type 1/3C Solder Connectors 30 Positions

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Vertical Female Type C Solder Connectors 128 Positions

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Vertical Female Type C Compliant Press–Fit Connectors 96 Positions

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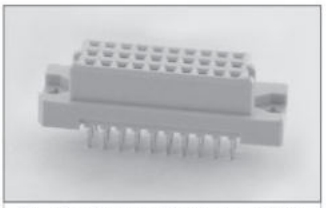
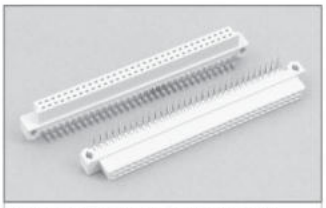
Vertical Female Type Half C Compliant Press–Fit Connectors 48 Positions

Page71



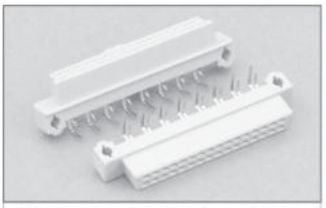
Vertical Female Type 1/3C Compliant Press–Fit Connectors 30 Positions

Page72



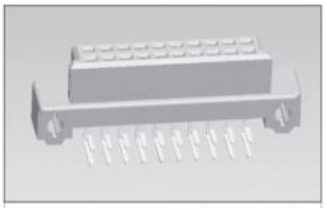
Vertical Female Type Q Connectors–Inversed 64 Positions

Page73



Vertical Female Type Half Q Connectors–Inversed 32 Positions

Page74



Vertical Female Type 1/3Q Connectors–Inversed 20 Positions

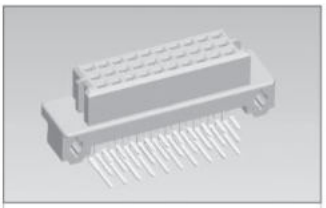
Page75

Right Angle Female Type R Connectors 96 Positions

Page76

Right Angle Female Type Half R Connectors 48 Positions

Page77

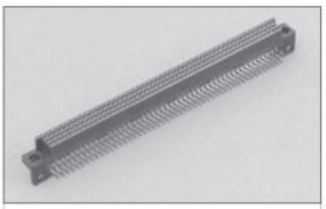


Right Angle Female Type 1/3R Connectors 30 Positions

Page78

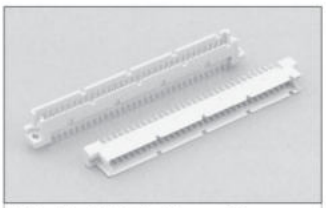
Right Angle Female Type R Connectors 120 Positions

Page79



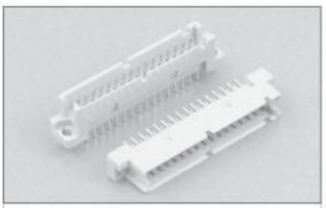
Right Angle Female Type R Connectors 150 Positions

Page80



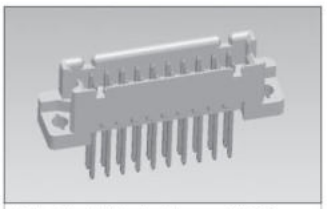
Vertical Male Type Q Solder Connectors–Inversed 64 Positions

Page81



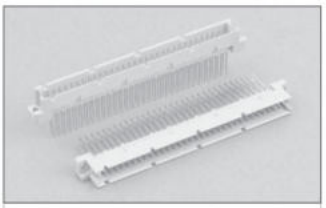
Vertical Male Type Half Q Solder Connectors–Inversed 32 Positions

Page82



Vertical Male Type 1/3Q Solder Connectors–Inversed 20 Positions

Page83

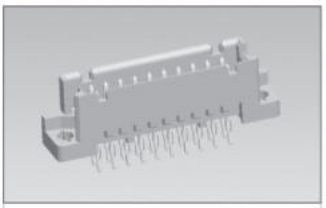


Vertical Male Type Q Compliant Press–Fit Connectors –Inversed 64 Positions

Page84

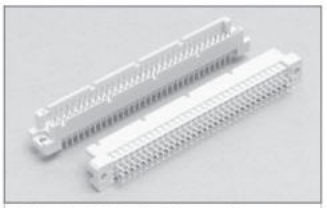
Vertical Male Type Half Q Compliant Press–Fit Connectors –Inversed 32 Positions

Page85



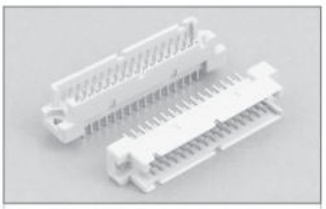
Vertical Male Type 1/3Q Compliant Press–Fit Connectors –Inversed 20 Positions

Page86



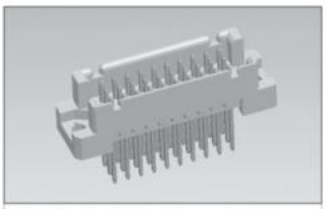
Vertical Male Type R Solder Connectors 96 Positions

Page87



Vertical Male Type Half R Solder Connectors 48 Positions

Page88



Vertical Male Type 1/3R Solder Connectors 30 Positions

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Vertical Male Type R Compliant Press–Fit Connectors 96 Positions

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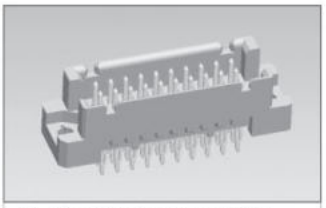
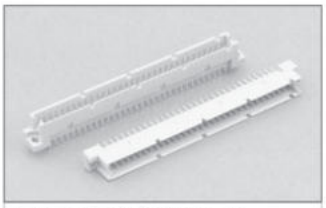
Vertical Male Type Half R Compliant Press–Fit Connectors 48 Positions

Page91



Vertical Male Type 1/3R Compliant Press–Fit Connectors 30 Positions

Page92



Vertical Male Type R Solder Connectors 120 Positions

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Vertical Male Type R Compliant Press–Fit Connectors 120 Positions

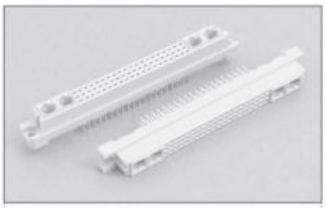
Page94

Right Angle Male Type M Connectors

Page95~Page96

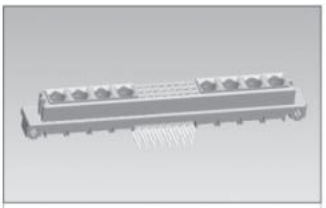
Vertical Female Type M Press–Fit Connectors

Page97~Page98



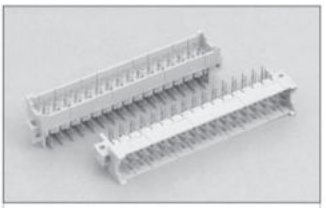
Vertical Female Type M Solder Connectors

Page99~Page100



Right Angle Female Type M Connectors

Page101~Page102



Vertical Male Type F48 Connectors

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Vertical Female Type F48 Connectors

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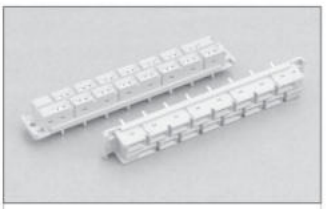
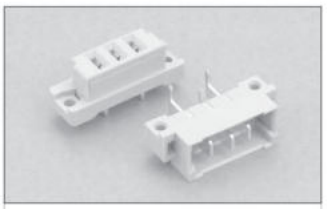
Right Angle Male Type H15 Connectors

Page106



Vertical Female Type H15 Connectors

Page107



Vertical Female & Male R.A Type H3 Connectors

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Note:Other variations, please consult factory

How to Order

126 - 1 - 64 1 - 10 - 10 B - a - L

Series No.

125 – Two row,
male–right angle type
female–straight type
126 – Three row,Four Row
male–right angle type
female–straight type
130 – Two row,
male–straight type
female–right angle type
131 – Three row,
male–straight type
female–right angle type

Connector type

1– Female 2.54mm pitch
2– Male 2.54mm pitch
3– Female 5.08mm pitch
4– Male 5.08mm pitch

No. of contacts

03 TO 150–PINS

B,Q Type: 64PIN,
1/2B,1/2Q Type: 32PIN,
1/3B,1/3Q Type: 20PIN,
C Type: 96PIN,128PIN,150PIN
R Type:96PIN,120PIN,150PIN
1/2C,1/2R Type: 48PIN
1/3C,1/3R Type: 30PIN
M Type: 78+2PIN,60+4PIN,42+6PIN,24+8PIN
F Type: 48PIN
H Type: 15PIN,3PIN

Rows loaded with contacts

1– Row(a)
2– Row(b)
3– Row(a+b)
4– Row(a+c)
5– Row(b+c)
6– Row a+b+c
7– Row d+b+z
8– Row b+z
9– Row d+z
10– Row a+b+c+d
11– Row a+d
7F– Row f+d+b+z

Termination

10–Straight tail length 2.5mm
11–Straight tail length 3.2mm(for type F only)
12–Straight tail length 4.0mm
13–Straight tail length 4.5mm(for type F only)
14–Straight tail length 5.0mm
15–Straight tail length 7.4mm
16–Straight tail length 10.0mm(for type H only)
17–Right angle tail length 7.0mm
20–Right angle tail length 3.0mm
25–Right angle tail length 3.5mm
21–Right angle tail length 4.4mm
22–Right angle tail length 13.0mm
23–Right angle tail length 17.0mm
30–Wrap posts tail length 13.0mm
40–Wrap posts tail length 17.0mm
50–Press fit tail length 5.0mm
60–Press fit tail length 13.0mm
70–Press fit tail length 17.0mm

Performance levle

10– Class III,Tin–plated on tail
11– Class III,Flash gold on tail
20– Class II,Tin–plated on tail
21– Class II,Flash gold on tail
30– Hard silver plated
100– Full Gold plated
200–15 or 20 U" Au on contact area
15 or 20 U" Au on tail to mating

B–for connector with snap–in–clip.
Omit for connector without boardlock

Male connector with

Premating contacts,EG al & 32 with extended pin,the code no–al/32,
Omit–for stanard connector

Male connector with late mate contact,EGal with late mate contact the code no.–Lal omit–for stanard connecter.

Two–piece Printed Circuit Connectors

INDIRECT CONNERTORS

It can eliminate the problems of board warpage,different board thickness.

HIGH DENSITY

120 conntacts in 2.54mm grid are available in a compact body.

HIGH RELIABIILITY

Dual beam metal–to–metal contact polarized connectors for all series to prevent mismating.
This connectors are versatilely used in telecommunications,instruments,computers,control system ect.

general specifications

Number of contacts:3,15,16,20,24,30,32,40,48,50,60,64,80,96,120,128,150
Contacts spacing:2.54mm,5.08mm
Material
Insulator:Glass filled polyester (PBT,UL flammability 94V–0)
Contacts:Male brass ,Female phosphor bronze
Contacts finish:Contact area:Gold over nickel(Per requitrements of performance class 3,classs 2)
Termination area: Tin–plated or gold–plated for long wrap post

Technical data

EURO DIN 41612	B,C,Q,R TYPE	F48 TYPE	H15 TYPE	G TYPE
Housing	PBT& 30% Glass Fiber(UL 94V–0)			
Contact	Male:Brass Female: Phosphor Bronze	Phosphor Bronze	Male:Brass Female: Phosphor Bronze	
Operating Temperature	–55 ℃ ~+105 ℃			
Contact Resistance	20m(ohm)Max		8m(ohm)Max	15m(ohm) Max
Insulator Resistance	10^{6} M(ohm)min.at DC 100V			
Current Rating	2 AMP	5.6 AMP	15 AMP	6 AMP
Withstanding Voltage	AC 1000V for 1 minute		AC 3100V for 1 minute	AC 1550V for 1 minute
Insertion Force	150pin max.140N 48pin max.45N 128pin max.120N 32pin max.30N 96 pin max.90N 30pin max.28N 64 pin max.60N 20pin max.18N	75 N max	90N max	90N max
Withdrawal Force	0.15 N min.per individual contact		0.2N/pin min	0.15N/pin min
Contact Rating Selective gold plated	Class 2 Class 3		An/Ni,TiN/Ni,Plating	Class 2 Class 3

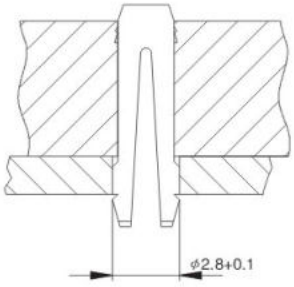
OPTIONS:

–B

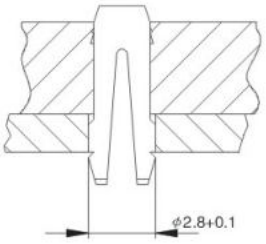
CONNECTORS WITH SNAP–IN–MOUNTING CLIPS

The mounting clips are designed for use with 1.6mm P.C.B.thickness,the material of mounting clips is copper alloy and it is tin plated.
The connector with a board–lock is pressed onto the PCB and fixed into the mounting hole of the PCB by spring action of the board–lock.
The force of the spring contact is sufficient to hold the connector in place during the solder process.
For drilled through mounting holes,the holding force of the connector is significantly increased by soldering of the board–locks during the process.
All solder connectors can be ordered with this feature,please refer to page 38 for the complete part number coding.
E.G.126–2–486–20–10–B

Type B,C–Male Connectors
Q,R–Female Connectors



Type B,C–Female Connectors
Q,R–Male Connectors



–A & –L

PRE–MATING/LATE–MATING MALE CONTACT PIN FOR TYPE B.C.R.F.H.

Premating contacts can be loaded in any position upon request.

Dimension

TYPE	Standard	Premating contact	Late mate contact
B,B/2,C,C/2	4.9 ± 0.1	+1.0=5.9 ± 0.1	–0.8=4.1 ± 0.1
Q,1/2Q R,R/2 Mating side	4.9 ± 0.1	+1.0=5.9 ± 0.1 +0.8=5.7 ± 0.1	–0.8=4.1 ± 0.1 –0.4=4.5 ± 0.1
F	6.1 ± 0.1	+1.5=7.6 ± 0.1	–
h	6.5 ± 0.1	+1.5=8.0 ± 0.1	–

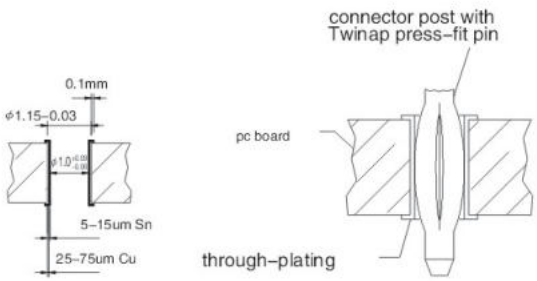
Other length on request

Thru Hold Specifications for Pressfit Technology, Thru Hold Drilling,SN and Bare CU

PCB Hole Tin Plated

Hole	ϕ1.0mm
Bore hold	1.12~1.15mm
Cu	25~75um
SN	5~15um
Plated–Thru hold	0.94~1.09mm
PCB Thinkness	≥ 1.6mm
Press in Force Per Pin	150 N Max
Retention Force Per Pin	50 N Max

Longitudinal Section of P.T.H.
With Twinap Press–Fit Pin



Fax Request

Description of special typecs – First mate last break contacts – selective loading

Connectors acc,DIN 41612 Types B.C.Q.R.F.H

Company

Phone

First Name

Last Name

Fax

Address

Address

Signature

Based on W.E.connector described in catalog

Weitronic–Part–No.

Required Quantity .....

1/3 1/2

Type B,C,Q,R–Female Connectors

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
a																																
b																																
c																																

Type B,C,Q,R–Male Connectors
Mating Side

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
a																																
b																																
c																																

Backside

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
a																																
b																																
c																																

Type F ☐ Male Connectors

☐ Female Connectors

	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
d																
b																
z																

Type H ☐ Male Connectors

☐ Female Connectors

	6		10		14		18		22		26		30	
d														
z														
	4		8		12		16		20		24		28	32

o : standard

△ : not assembled

+ : 0.8 mm premateing

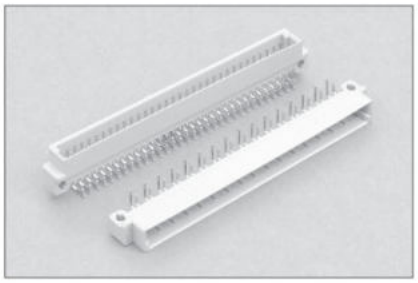
x : 1.0 mm premateing

* : 1.5 mm premateing

– : 0.8 mm late mate

/ : 1.0 mm late mate

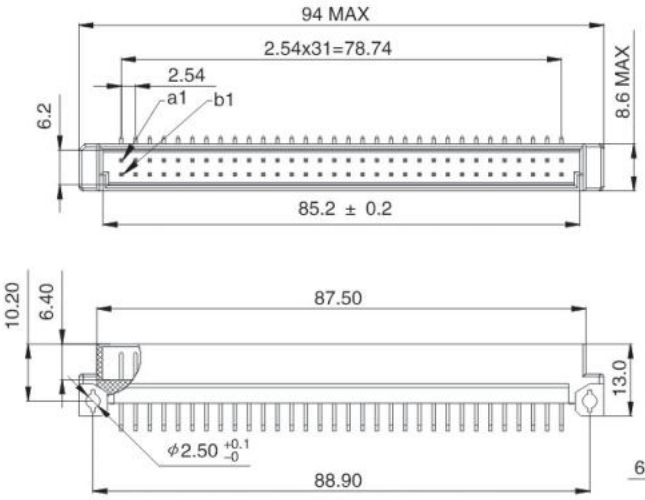
Right Angle Male Type B Connectors 64 Positions



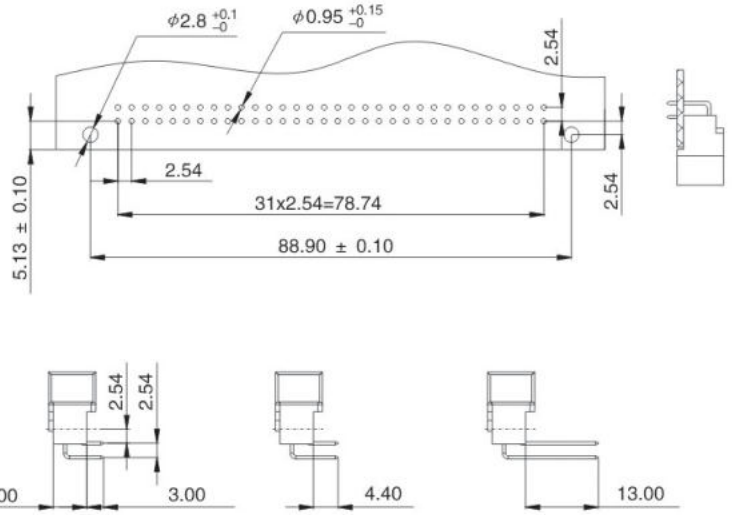
Option:

- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions



Recommended P.C.B. layout



Ordering Information

NO. OF CONTACTS		64	32	32	16
POSITION		a+b	a	a+b (2.4.6....)	a (2.4.6....)
TERMINATION	QUALITY		PART NUMBER		
3.0 mm	III	125–2–643–20–10	125–2–321–20–10	125–4–323–20–10	125–4–161–20–10
	II	125–2–643–20–20	125–2–321–20–20	125–4–323–20–20	125–4–161–20–20
4.4 mm	III	125–2–643–21–10	125–2–321–21–10	125–4–323–21–10	125–4–161–21–10
	II	125–2–643–21–20	125–2–321–21–20	125–4–323–21–20	125–4–161–21–20
13.0 mm	III	125–2–643–22–10	125–2–321–22–10	125–4–323–22–10	125–4–161–22–10
	II	125–2–643–22–20	125–2–321–22–20	125–4–323–22–20	125–4–161–22–20

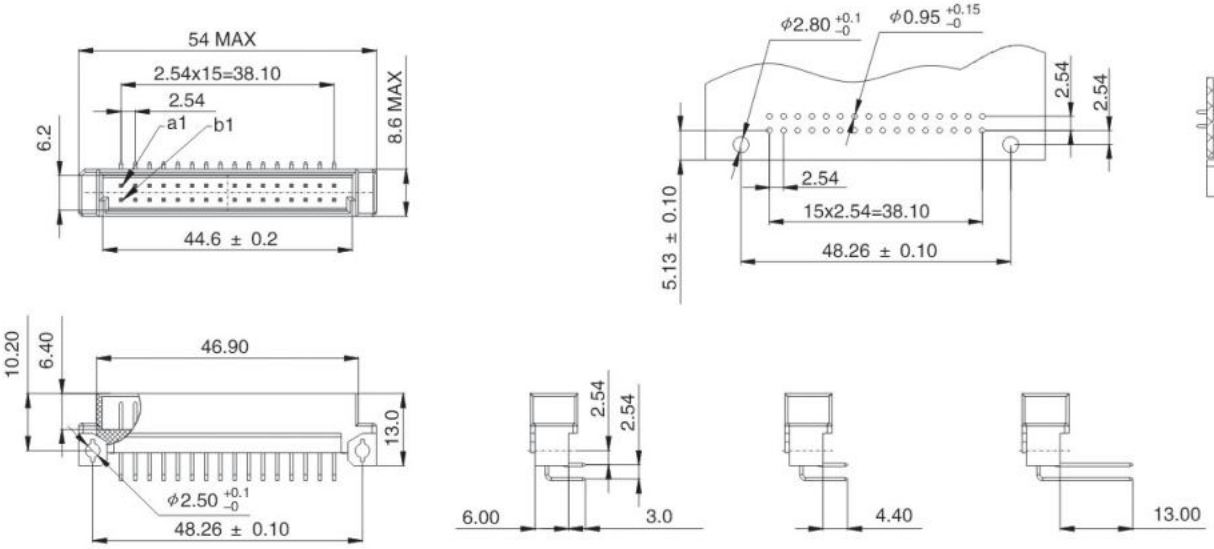
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Male Type Half B Connectors 32 Positions

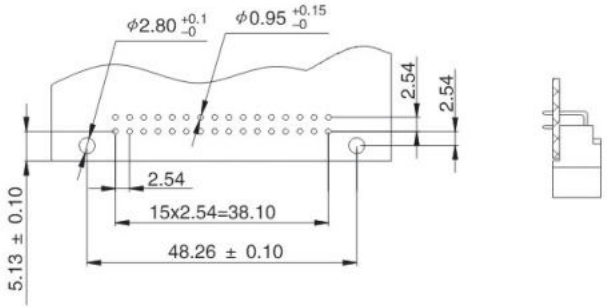
Option:

- Extended male contact
- Connector with pre-installed snap-in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions



Recommended P.C.B. layout

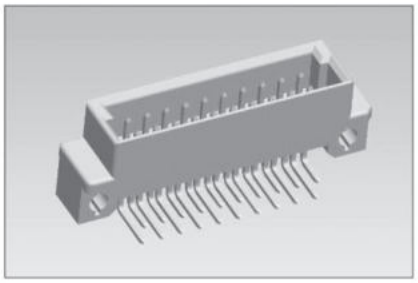


Ordering Information

NO. OF CONTACTS		32	16	16
POSITION		a+b	a	a+b(2,4,6....)
TERMINATION	QUALITY	PART NUMBER		
3.0 mm	III	125-2-323-20-10	125-2-161-20-10	125-4-163-20-10
	II	125-2-323-20-20	125-2-161-20-20	125-4-163-20-20
4.4 mm	III	125-2-323-21-10	125-2-161-21-10	125-4-163-21-10
	II	125-2-323-21-20	125-2-161-21-20	125-4-163-21-20
13.0 mm	III	125-2-323-22-10	125-2-161-22-10	125-4-163-22-10
	II	125-2-323-22-20	125-2-161-22-20	125-4-163-22-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Male Type 1/3B Connectors 20 Positions

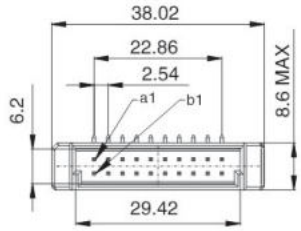


Option:

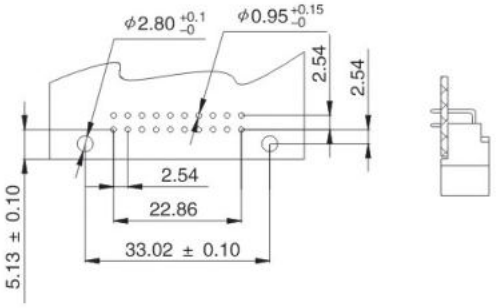
- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

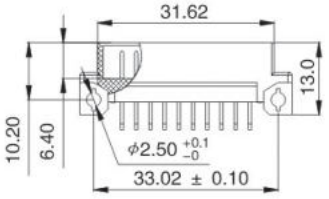
NEW

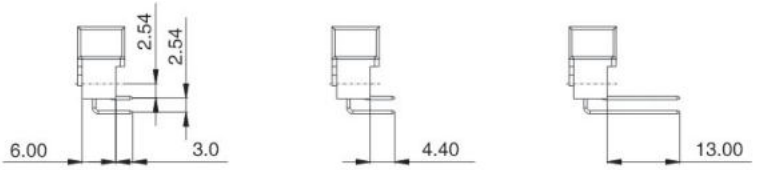
Dimensions



Recommended P.C.B. layout





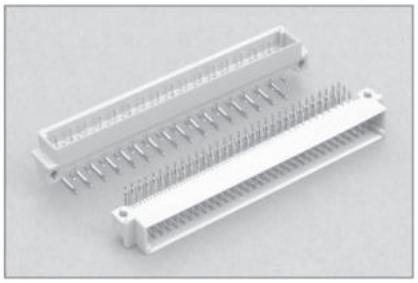


Ordering Information

NO. OF CONTACTS		20	10	10
POSITION		a+b	a	a+b(2,4,6....)
TERMINATION	QUALITY	PART NUMBER		
3.0 mm	III	125–2–203–20–10	125–2–101–20–10	125–4–103–20–10
	II	125–2–203–20–20	125–2–101–20–20	125–4–103–20–20
4.4 mm	III	125–2–203–21–10	125–2–101–21–10	125–4–103–21–10
	II	125–2–203–21–20	125–2–101–21–20	125–4–103–21–20
13.0 mm	III	125–2–203–22–10	125–2–101–22–10	125–4–103–22–10
	II	125–2–203–22–20	125–2–101–22–20	125–4–103–22–20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

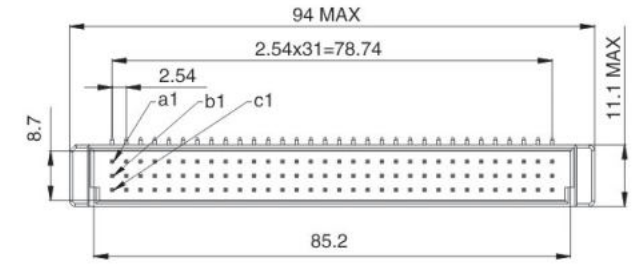
Right Angle Male Type C Connectors 96 Positions



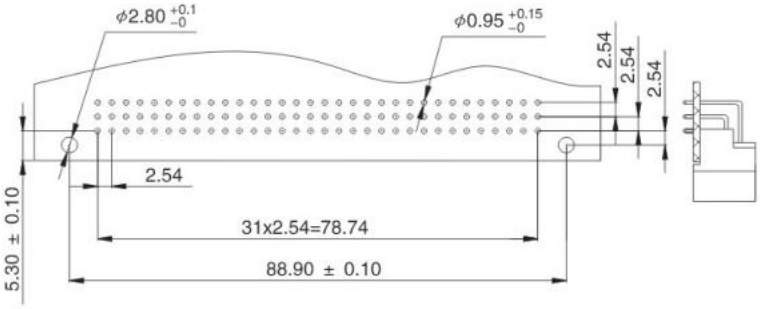
Option:

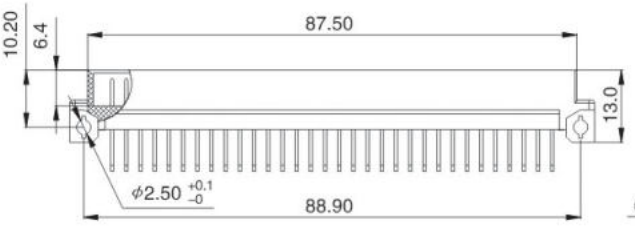
- Connector with pre–installed snap–in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

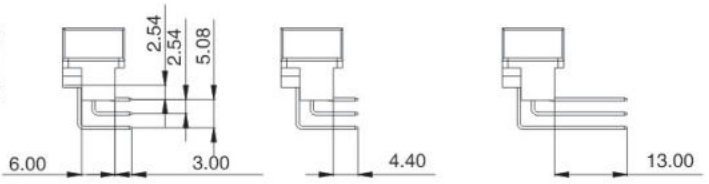
Dimensions



Recommended P.C.B. layout





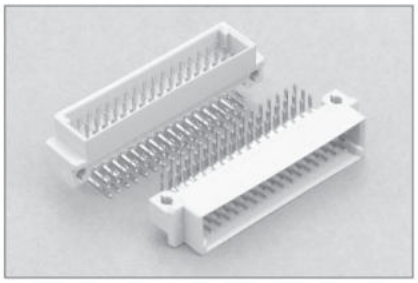


Ordering Information

NO. OF CONTACTS		96	64	64	32	48	32
POSITION		a+b+c	a+c	a+b	a	a+b+c(2.4.6....)	a+c(2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	126–2–966–20–10	126–2–644–20–10	126–2–643–20–10	126–2–321–20–10	126–4–486–20–10	126–4–324–20–10
	II	126–2–966–20–20	126–2–644–20–20	126–2–643–20–20	126–2–321–20–20	126–4–486–20–20	126–4–324–20–20
4.4 mm	III	126–2–966–21–10	126–2–644–21–10	126–2–643–21–10	126–2–321–21–10	126–4–486–21–10	126–4–324–21–10
	II	126–2–966–21–20	126–2–644–21–20	126–2–643–21–20	126–2–321–21–20	126–4–486–21–20	126–4–324–21–20
13.0 mm	III	126–2–966–22–10	126–2–644–22–10	126–2–643–22–10	126–2–321–22–10	126–4–486–22–10	126–4–324–22–10
	II	126–2–966–22–20	126–2–644–22–20	126–2–643–22–20	126–2–321–22–20	126–4–486–22–20	126–4–324–22–20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

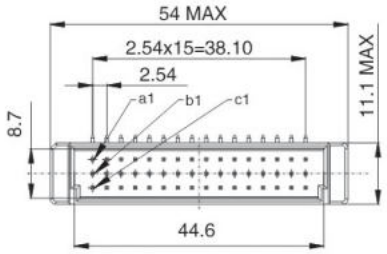
Right Angle Male Type Half C Connectors 48 Positions



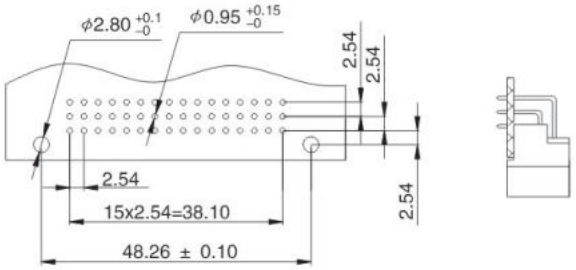
Option:

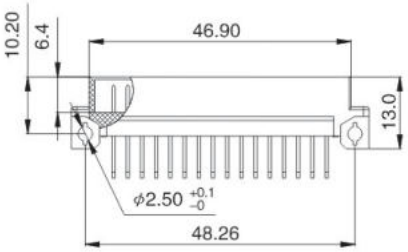
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

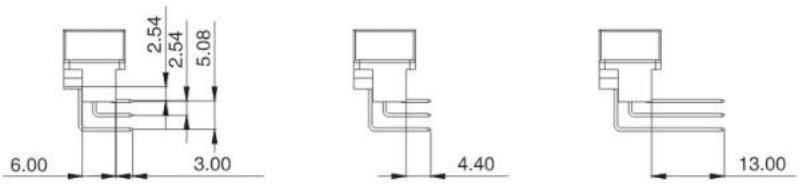
Dimensions



Recommended P.C.B. layout





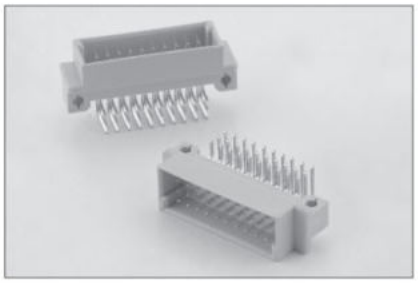


Ordering Information

NO. OF CONTACTS		48	32	32	16	24	16
POSITION		a+b+c	a+c	a+b	a	a+b+c(2.4.6....)	a+c(2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	126-2-486-20-10	126-2-324-20-10	126-2-323-20-10	126-2-161-20-10	126-4-246-20-10	126-4-164-20-10
	II	126-2-486-20-20	126-2-324-20-20	126-2-323-20-20	126-2-161-20-20	126-4-246-20-20	126-4-164-20-20
4.4 mm	III	126-2-486-21-10	126-2-324-21-10	126-2-323-21-10	126-2-161-21-10	126-4-246-21-10	126-4-164-21-10
	II	126-2-486-21-20	126-2-324-21-20	126-2-323-21-20	126-2-161-21-20	126-4-246-21-20	126-4-164-21-20
13.0 mm	III	126-2-486-22-10	126-2-324-22-10	126-2-323-22-10	126-2-161-22-10	126-4-246-22-10	126-4-164-22-10
	II	126-2-486-22-20	126-2-324-22-20	126-2-323-22-20	126-2-161-22-20	126-4-246-22-20	126-4-164-22-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Male Type 1/3C Connectors 30 Positions

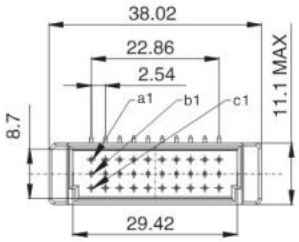


NEW

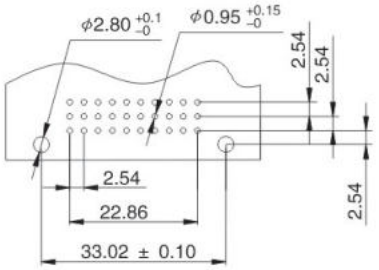
Option:

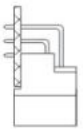
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

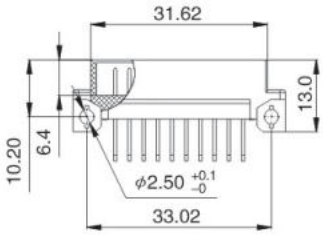
Dimensions

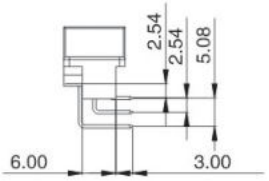


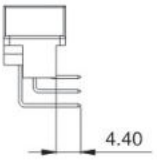
Recommended P.C.B. layout

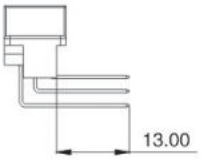










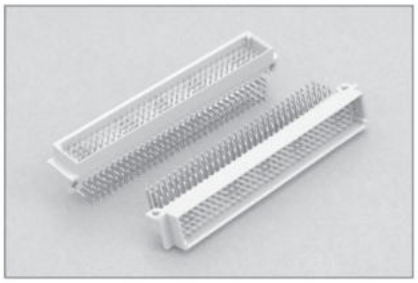


Ordering Information

NO. OF CONTACTS		30	20	20	10	15	10
POSITION		a+b+c	a+c	a+b	a	a+b+c(2.4.6....)	a+c(2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	126-2-306-20-10	126-2-204-20-10	126-2-203-20-10	126-2-101-20-10	126-4-156-20-10	126-4-104-20-10
	II	126-2-306-20-20	126-2-204-20-20	126-2-203-20-20	126-2-101-20-20	126-4-156-20-20	126-4-104-20-20
4.4 mm	III	126-2-306-21-10	126-2-204-21-10	126-2-203-21-10	126-2-101-21-10	126-4-156-21-10	126-4-104-21-10
	II	126-2-306-21-20	126-2-204-21-20	126-2-203-21-20	126-2-101-21-20	126-4-156-21-20	126-4-104-21-20
13.0 mm	III	126-2-306-22-10	126-2-204-22-10	126-2-203-22-10	126-2-101-22-10	126-4-156-22-10	126-4-104-22-10
	II	126-2-306-22-20	126-2-204-22-20	126-2-203-22-20	126-2-101-22-20	126-4-156-22-20	126-4-104-22-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

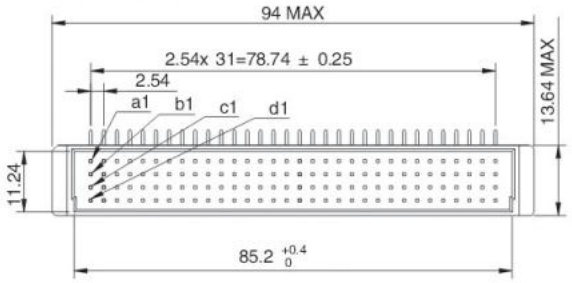
Right Angle Male Type C Connectors 4 Row 128 Positions



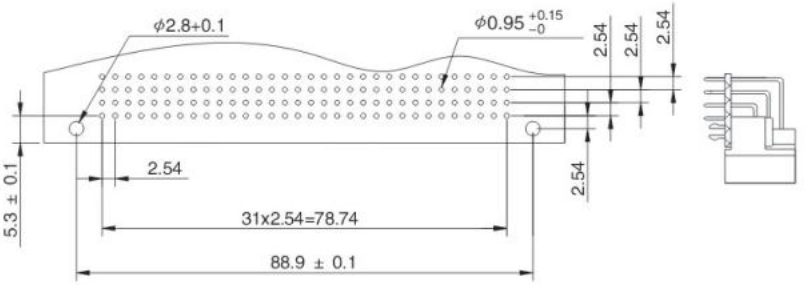
Option:

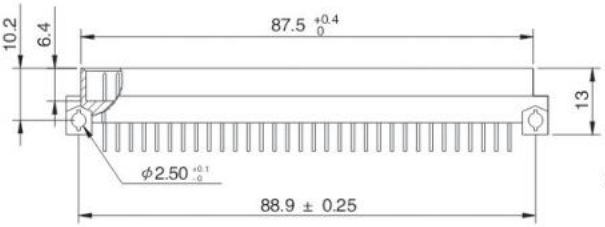
- Connector with pre–installed snap–in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

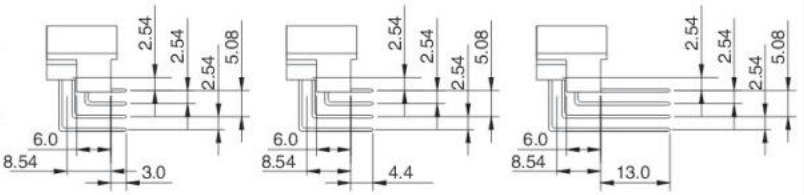
Dimensions



Recommended P.C.B. layout







Ordering Information

NO. OF CONTACTS		128	64
POSITION		a+b+c+d	a+d
TERMINATION	QUALITY	PART NUMBER	
3.0 mm	III	126–2–12810–20–10	126–2–6411–20–10
	II	126–2–12810–20–20	126–2–6411–20–20
4.4 mm	III	126–2–12810–21–10	126–2–6411–21–10
	II	126–2–12810–21–20	126–2–6411–21–20
13.0 mm	III	126–2–12810–22–10	126–2–6411–22–10
	II	126–2–12810–22–20	126–2–6411–22–20

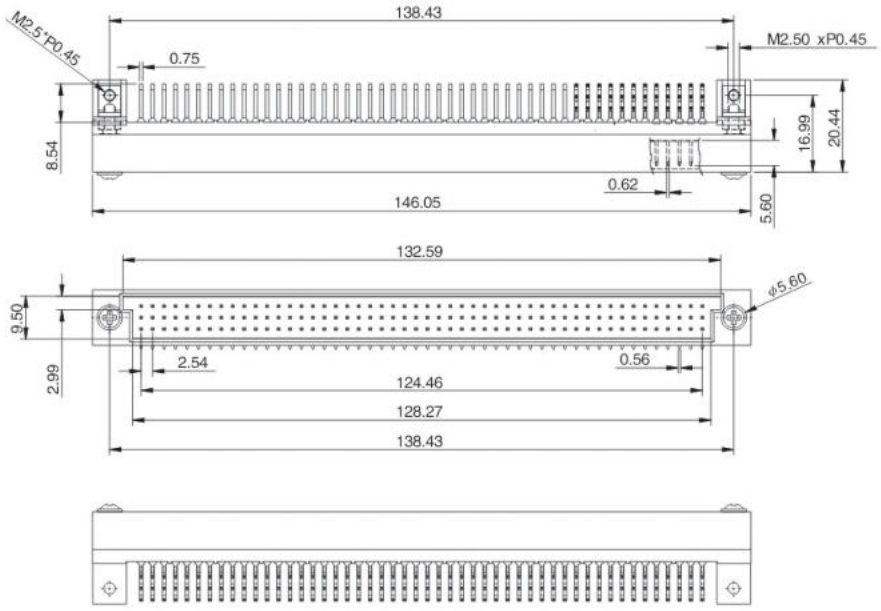
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

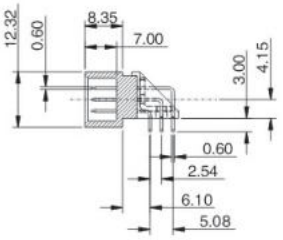
Right Angle Male Type C Connectors 150 Pin

Option:

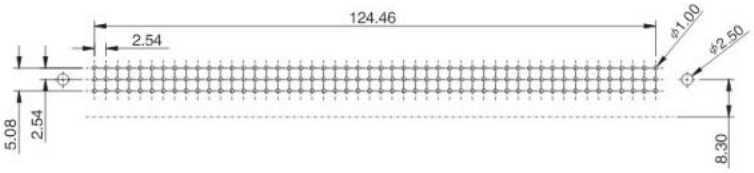
- Housing:PPS,UL94–V0,COLOR: BLACK .
- Contact:Copper Alloy
- Please refer to page 48 for complete part number coding
- Connector with through threaded hole mounting method
- Other variations, please consult factory

Dimensions





Recommended P.C.B. layout

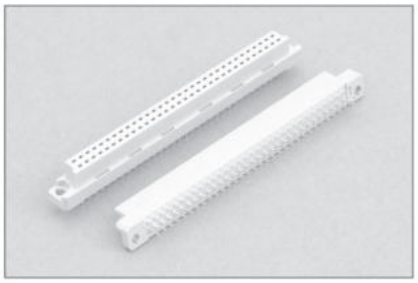


Ordering Information

NO. OF CONTACTS		150
POSITION		a+b+c
TERMINATION	QUALITY	PART NUMBER
3.00 mm	II	126–2–1506–20–20
3.00 mm	III	126–2–1506–20–10

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

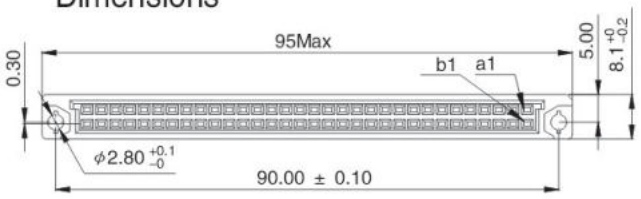
Vertical Female Type B Connectors 64 Positions



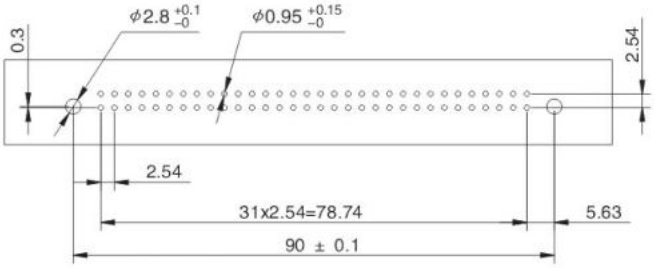
Option:

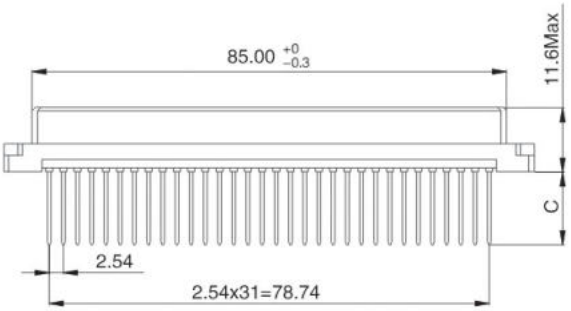
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

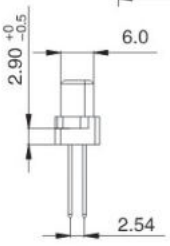
Dimensions



Recommended P.C.B. layout







CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

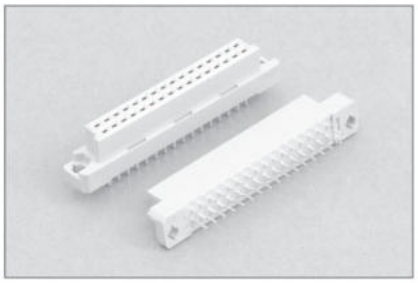
NO. OF CONTACTS		64	32	32	16
POSITION		a+b	a	a+b (2.4.6....)	a (2.4.6....)
TERMINATION	QUALITY	PART NUMBER			
2.5 mm	III	125-1-643-10-10	125-1-321-10-10	125-3-323-10-10	125-3-161-10-10
	II	125-1-643-10-20	125-1-321-10-20	125-3-323-10-20	125-3-161-10-20
4.0 mm	III	125-1-643-12-10	125-1-321-12-10	125-3-323-12-10	125-3-161-12-10
	II	125-1-643-12-20	125-1-321-12-20	125-3-323-12-20	125-3-161-12-20
5.0 mm	III	125-1-643-14-10	125-1-321-14-10	125-3-323-14-10	125-3-161-14-10
	II	125-1-643-14-20	125-1-321-14-20	125-3-323-14-20	125-3-161-14-20
7.4 mm	III	125-1-643-15-10	125-1-321-15-10	125-3-323-15-10	125-3-161-15-10
	II	125-1-643-15-20	125-1-321-15-20	125-3-323-15-20	125-3-161-15-20
13.0 mm	III	125-1-643-30-10	125-1-321-30-10	125-3-323-30-10	125-3-161-30-10
	II	125-1-643-30-20	125-1-321-30-20	125-3-323-30-20	125-3-161-30-20
17.0 mm	III	125-1-643-40-10	125-1-321-40-10	125-3-323-40-10	125-3-161-40-10
	II	125-1-643-40-20	125-1-321-40-20	125-3-323-40-20	125-3-161-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

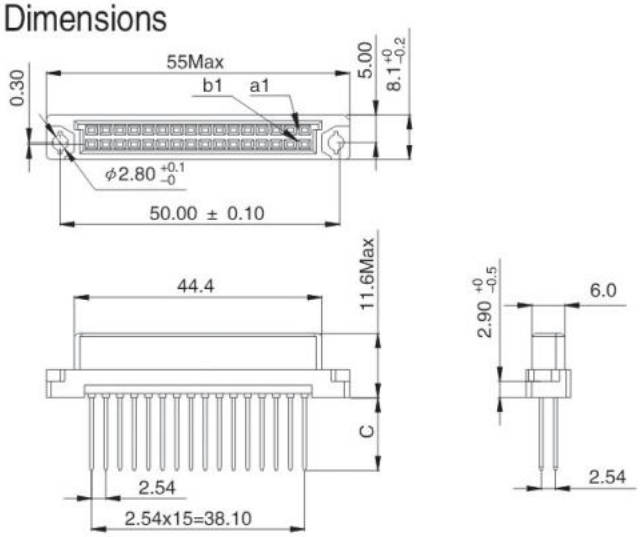
Vertical Female Type Half B Connectors 32 Positions



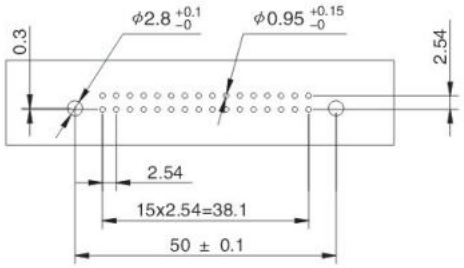
Option:

- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions



Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

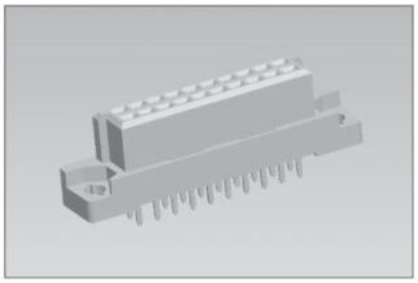
NO. OF CONTACTS		32	16	16
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
2.5 mm	III	125-1-323-10-10	125-1-161-10-10	125-3-163-10-10
	II	125-1-323-10-20	125-1-161-10-20	125-3-163-10-20
4.0 mm	III	125-1-323-12-10	125-1-161-12-10	125-3-163-12-10
	II	125-1-323-12-20	125-1-161-12-20	125-3-163-12-20
5.0 mm	III	125-1-323-14-10	125-1-161-14-10	125-3-163-14-10
	II	125-1-323-14-20	125-1-161-14-20	125-3-163-14-20
7.4 mm	III	125-1-323-15-10	125-1-161-15-10	125-3-163-15-10
	II	125-1-323-15-20	125-1-161-15-20	125-3-163-15-20
13.0 mm	III	125-1-323-30-10	125-1-161-30-10	125-3-163-30-10
	II	125-1-323-30-20	125-1-161-30-20	125-3-163-30-20
17.0 mm	III	125-1-323-40-10	125-1-161-40-10	125-3-163-40-10
	II	125-1-323-40-20	125-1-161-40-20	125-3-163-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type 1/3B Connectors 20 Positions

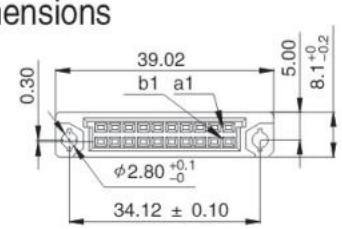


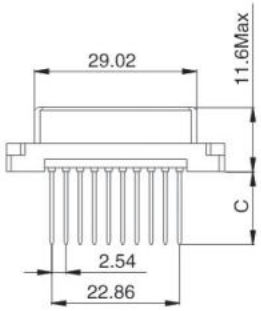
Option:

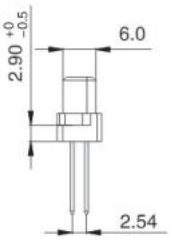
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

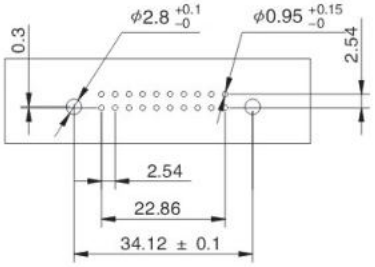
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

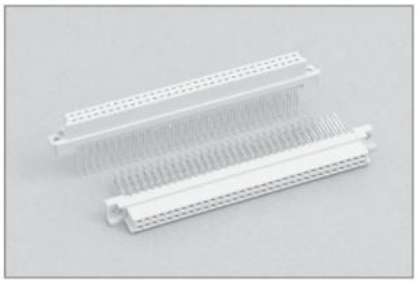
NO. OF CONTACTS		20	10	10
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
2.5 mm	III	125-1-203-10-10	125-1-101-10-10	125-3-103-10-10
	II	125-1-203-10-20	125-1-101-10-20	125-3-103-10-20
4.0 mm	III	125-1-203-12-10	125-1-101-12-10	125-3-103-12-10
	II	125-1-203-12-20	125-1-101-12-20	125-3-103-12-20
5.0 mm	III	125-1-203-14-10	125-1-101-14-10	125-3-103-14-10
	II	125-1-203-14-20	125-1-101-14-20	125-3-103-14-20
7.4 mm	III	125-1-203-15-10	125-1-101-15-10	125-3-103-15-10
	II	125-1-203-15-20	125-1-101-15-20	125-3-103-15-20
13.0 mm	III	125-1-203-30-10	125-1-101-30-10	125-3-103-30-10
	II	125-1-203-30-20	125-1-101-30-20	125-3-103-30-20
17.0 mm	III	125-1-203-40-10	125-1-101-40-10	125-3-103-40-10
	II	125-1-203-40-20	125-1-101-40-20	125-3-103-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

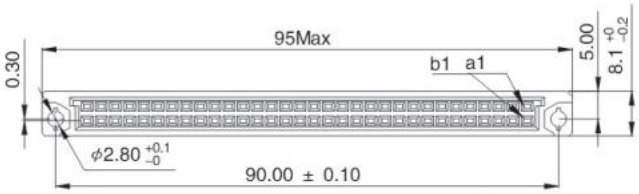
Vertical Female Type B Compliant Press–Fit Connectors 64 Positions



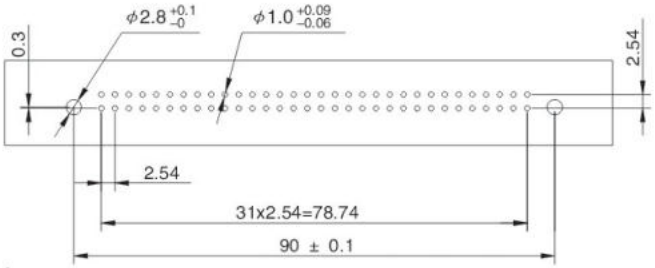
Option:

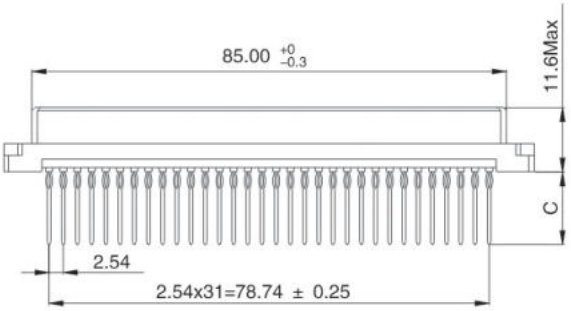
- Coded connectors
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

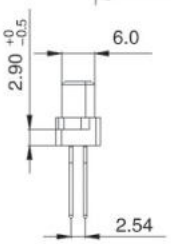
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

NO. OF CONTACTS		64	32
POSITION		a+b	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	125–1–643–50–10	125–3–323–50–10
	II	125–1–643–50–20	125–3–323–50–20
13.0 mm	III	125–1–643–60–10	125–3–323–60–10
	II	125–1–643–60–20	125–3–323–60–20
17.0 mm	III	125–1–643–70–10	125–3–323–70–10
	II	125–1–643–70–20	125–3–323–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

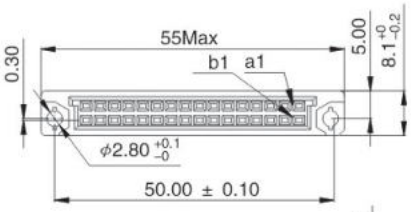
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

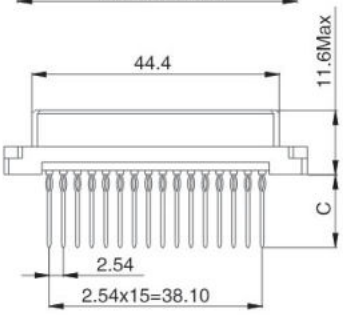
Vertical Female Type Half B Compliant Press–Fit Connectors 32 positions

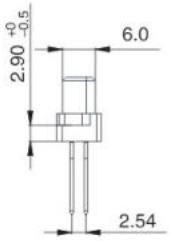
Option:

- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

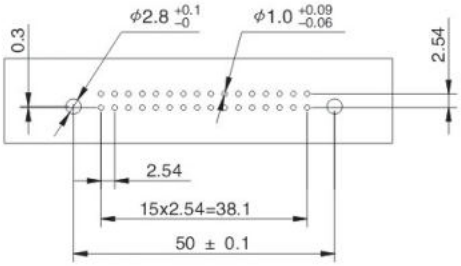
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

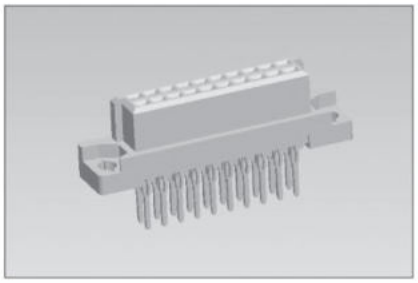
NO. OF CONTACTS		32	16
POSITION		a+b	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	125–1–323–50–10	125–3–163–50–10
	II	125–1–323–50–20	125–3–163–50–20
13.0 mm	III	125–1–323–60–10	125–3–163–60–10
	II	125–1–323–60–20	125–3–163–60–20
17.0 mm	III	125–1–323–70–10	125–3–163–70–10
	II	125–1–323–70–20	125–3–163–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type 1/3B Compliant Press–Fit Connectors 20 positions

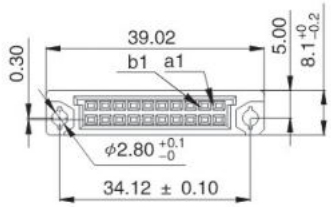


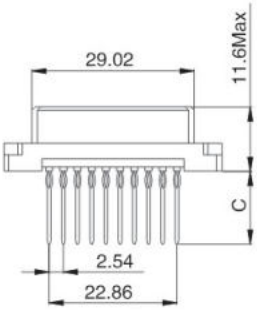
Option:

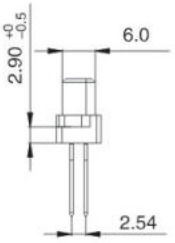
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

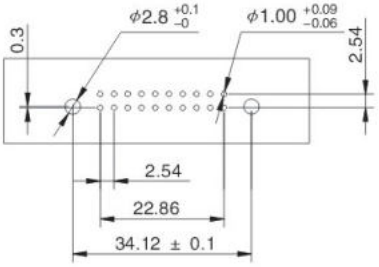
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

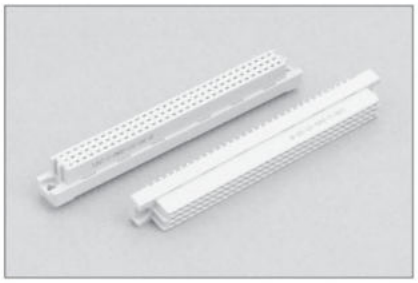
NO. OF CONTACTS		20	10
POSITION		a+b	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	125–1–203–50–10	125–3–103–50–10
	II	125–1–203–50–20	125–3–103–50–20
13.0 mm	III	125–1–203–60–10	125–3–103–60–10
	II	125–1–203–60–20	125–3–103–60–20
17.0 mm	III	125–1–203–70–10	125–3–103–70–10
	II	125–1–203–70–20	125–3–103–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

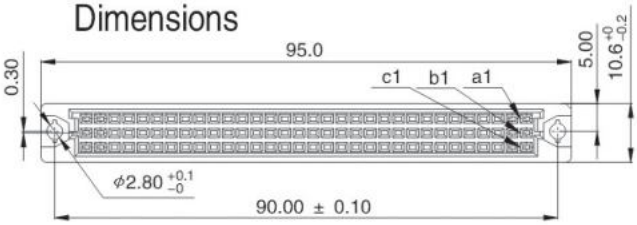
Vertical Female Type C Connectors 96 Positions



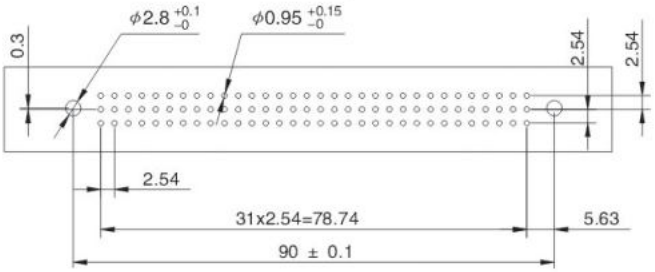
Option:

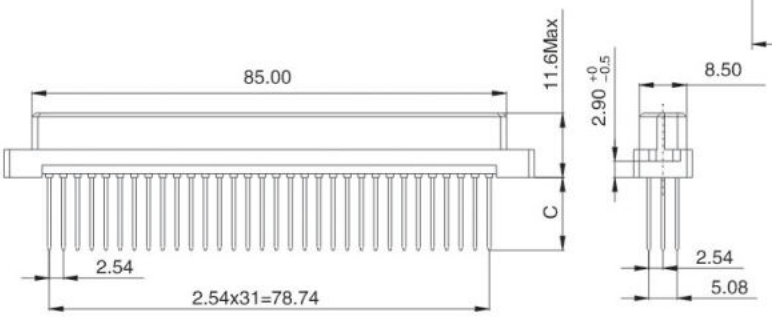
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions



Recommended P.C.B. layout





CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

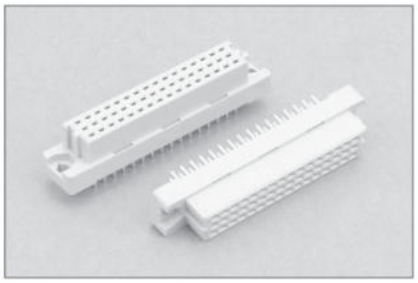
NO. OF CONTACTS		96	64	64	32	48	32
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6...)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	126-1-966-10-10	126-1-644-10-10	126-1-643-10-10	126-1-321-10-10	126-3-486-10-10	126-3-324-10-10
	II	126-1-966-10-20	126-1-644-10-20	126-1-643-10-20	126-1-321-10-20	126-3-486-10-20	126-3-324-10-20
4.0 mm	III	126-1-966-12-10	126-1-644-12-10	126-1-643-12-10	126-1-321-12-10	126-3-486-12-10	126-3-324-12-10
	II	126-1-966-12-20	126-1-644-12-20	126-1-643-12-20	126-1-321-12-20	126-3-486-12-20	126-3-324-12-20
5.0 mm	III	126-1-966-14-10	126-1-644-14-10	126-1-643-14-10	126-1-321-14-10	126-3-486-14-10	126-3-324-14-10
	II	126-1-966-14-20	126-1-644-14-20	126-1-643-14-20	126-1-321-14-20	126-3-486-14-20	126-3-324-14-20
7.4 mm	III	126-1-966-15-10	126-1-644-15-10	126-1-643-15-10	126-1-321-15-10	126-3-486-15-10	126-3-324-15-10
	II	126-1-966-15-20	126-1-644-15-20	126-1-643-15-20	126-1-321-15-20	126-3-486-15-20	126-3-324-15-20
13.0 mm	III	126-1-966-30-10	126-1-644-30-10	126-1-643-30-10	126-1-321-30-10	126-3-486-30-10	126-3-324-30-10
	II	126-1-966-30-20	126-1-644-30-20	126-1-643-30-20	126-1-321-30-20	126-3-486-30-20	126-3-324-30-20
17.0 mm	III	126-1-966-40-10	126-1-644-40-10	126-1-643-40-10	126-1-321-40-10	126-3-486-40-10	126-3-324-40-10
	II	126-1-966-40-20	126-1-644-40-20	126-1-643-40-20	126-1-321-40-20	126-3-486-40-20	126-3-324-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

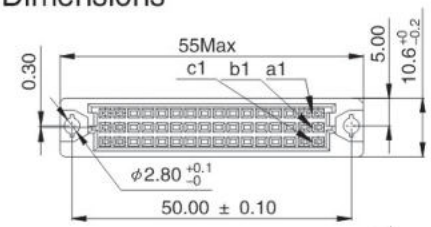
Vertical Female Type Half C Connectors 48 Positions

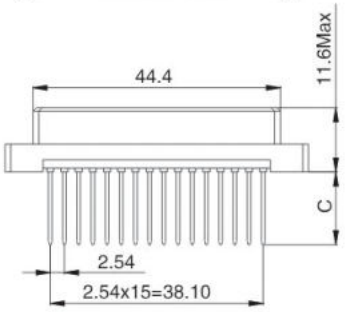


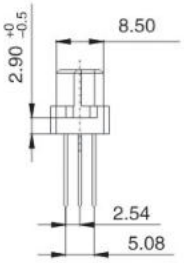
Option:

- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

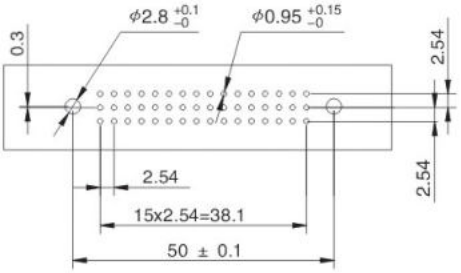
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

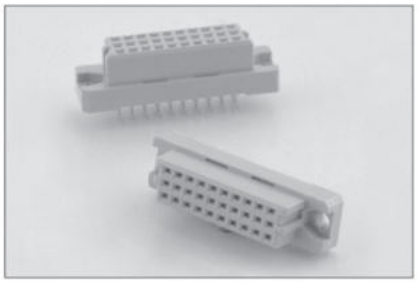
NO. OF CONTACTS		48	32	32	16	24	16
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6...)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	126-1-486-10-10	126-1-324-10-10	126-1-323-10-10	126-1-161-10-10	126-3-246-10-10	126-3-164-10-10
	II	126-1-486-10-20	126-1-324-10-20	126-1-323-10-20	126-1-161-10-20	126-3-246-10-20	126-3-164-10-20
4.0 mm	III	126-1-486-12-10	126-1-324-12-10	126-1-323-12-10	126-1-161-12-10	126-3-246-12-10	126-3-164-12-10
	II	126-1-486-12-20	126-1-324-12-20	126-1-323-12-20	126-1-161-12-20	126-3-246-12-20	126-3-164-12-20
5.0 mm	III	126-1-486-14-10	126-1-324-14-10	126-1-323-14-10	126-1-161-14-10	126-3-246-14-10	126-3-164-14-10
	II	126-1-486-14-20	126-1-324-14-20	126-1-323-14-20	126-1-161-14-20	126-3-246-14-20	126-3-164-14-20
7.4 mm	III	126-1-486-15-10	126-1-324-15-10	126-1-323-15-10	126-1-161-15-10	126-3-246-15-10	126-3-164-15-10
	II	126-1-486-15-20	126-1-324-15-20	126-1-323-15-20	126-1-161-15-20	126-3-246-15-20	126-3-164-15-20
13.0 mm	III	126-1-486-30-10	126-1-324-30-10	126-1-323-30-10	126-1-161-30-10	126-3-246-30-10	126-3-164-30-10
	II	126-1-486-30-20	126-1-324-30-20	126-1-323-30-20	126-1-161-30-20	126-3-246-30-20	126-3-164-30-20
17.0 mm	III	126-1-486-40-10	126-1-324-40-10	126-1-323-40-10	126-1-161-40-10	126-3-246-40-10	126-3-164-40-10
	II	126-1-486-40-20	126-1-324-40-20	126-1-323-40-20	126-1-161-40-20	126-3-246-40-20	126-3-164-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type 1/3C Connectors 30 Positions

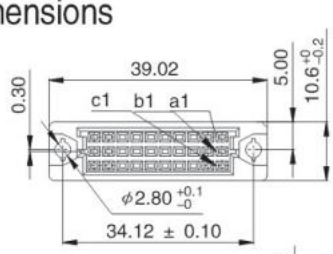


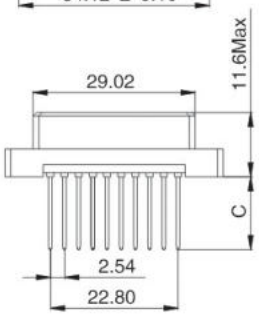
Option:

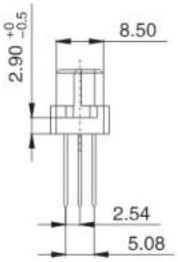
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

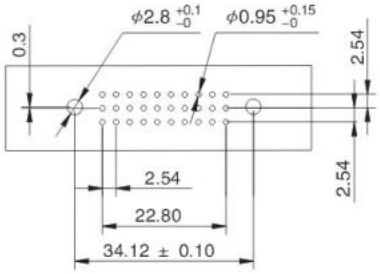
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4.0	5.0
T =	0.3x0.38	0.3x0.38	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

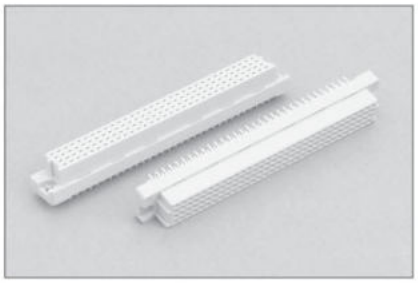
NO. OF CONTACTS		30	20	20	10	15	10
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6...)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	126-1-306-10-10	126-1-204-10-10	126-1-203-10-10	126-1-101-10-10	126-3-156-10-10	126-3-104-10-10
	II	126-1-306-10-20	126-1-204-10-20	126-1-203-10-20	126-1-101-10-20	126-3-156-10-20	126-3-104-10-20
4.0 mm	III	126-1-306-12-10	126-1-204-12-10	126-1-203-12-10	126-1-101-12-10	126-3-156-12-10	126-3-104-12-10
	II	126-1-306-12-20	126-1-204-12-20	126-1-203-12-20	126-1-101-12-20	126-3-156-12-20	126-3-104-12-20
5.0 mm	III	126-1-306-14-10	126-1-204-14-10	126-1-203-14-10	126-1-101-14-10	126-3-156-14-10	126-3-164-14-10
	II	126-1-306-14-20	126-1-204-14-20	126-1-203-14-20	126-1-101-14-20	126-3-156-14-20	126-3-104-14-20
7.4 mm	III	126-1-306-15-10	126-1-204-15-10	126-1-203-15-10	126-1-101-15-10	126-3-156-15-10	126-3-104-15-10
	II	126-1-306-15-20	126-1-204-15-20	126-1-203-15-20	126-1-101-15-20	126-3-156-15-20	126-3-104-15-20
13.0 mm	III	126-1-306-30-10	126-1-204-30-10	126-1-203-30-10	126-1-101-30-10	126-3-156-30-10	126-3-104-30-10
	II	126-1-306-30-20	126-1-204-30-20	126-1-203-30-20	126-1-101-30-20	126-3-156-30-20	126-3-104-30-20
17.0 mm	III	126-1-306-40-10	126-1-204-40-10	126-1-203-40-10	126-1-101-40-10	126-3-156-40-10	126-3-104-40-10
	II	126-1-306-40-20	126-1-204-40-20	126-1-203-40-20	126-1-101-40-20	126-3-156-40-20	126-3-104-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

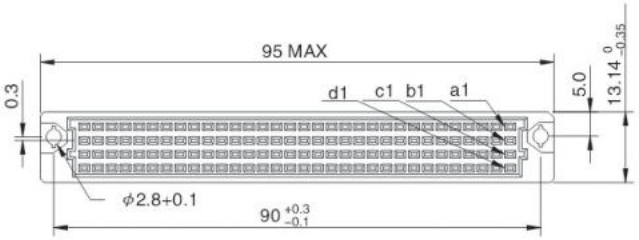
Vertical Female Type C Connectors 4 Row 128 Positions

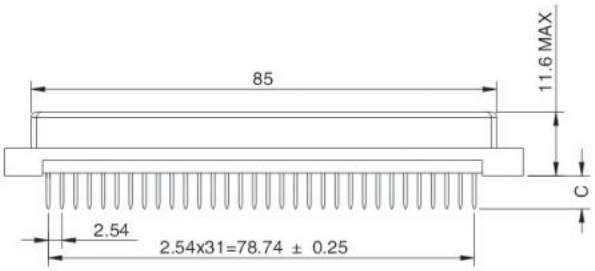


Option:

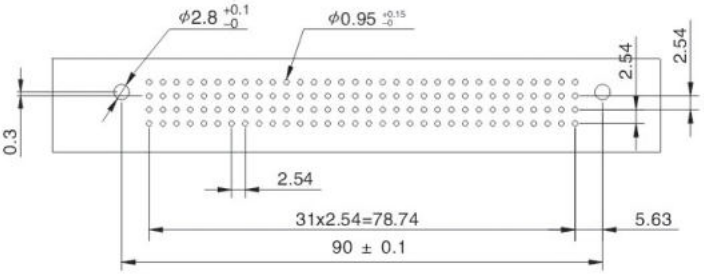
- Connector with pre-installed snap-in mounting clips.
- Other Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

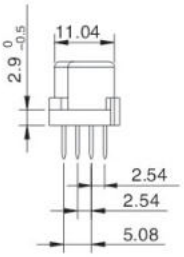
Dimensions





Recommended P.C.B. layout





CODE NO.	10	12
C =	2.5	4.0
T =	0.3x0.6	0.3x0.6

Ordering Information

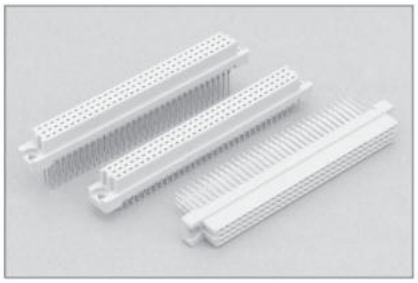
NO. OF CONTACTS		128	64
POSITION		a+b+c+d	a+d
TERMINATION	QUALITY	PART NUMBER	
2.5 mm	III	126-1-12810-10-10	126-1-6411-10-10
	II	126-1-12810-10-20	126-1-6411-10-20
4.0 mm	III	126-1-12810-12-10	126-1-6411-12-10
	II	126-1-12810-12-20	126-1-6411-12-20

Remarks:

10--Straight solder,tail length 2.5mm
12--Straight solder,tail length 4mm
14--Straight tail length 5mm
15--Straight tail length 7.4mm
30--Wrap post tail length 13.0mm
40--Wrap post tail length 17.0mm
T--Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

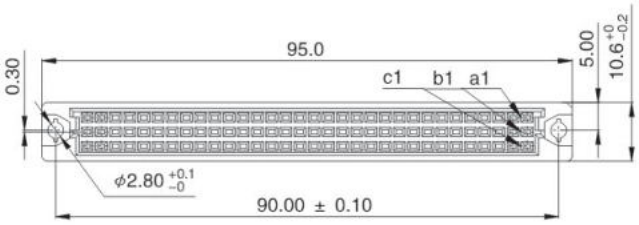
Vertical Female Type C Compliant Press–Fit Connectors 96 Positions



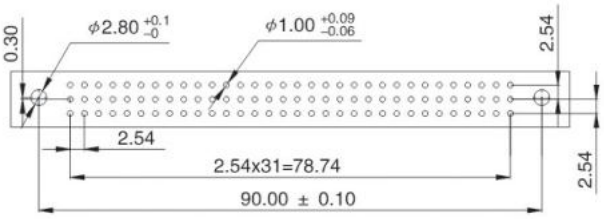
Option:

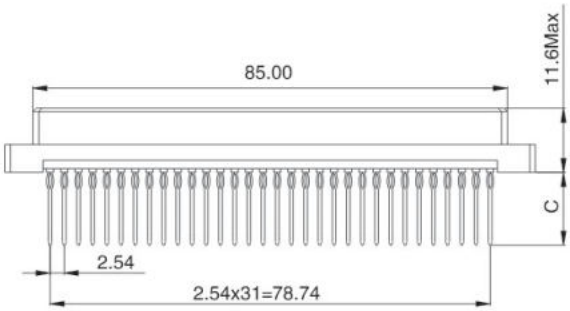
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

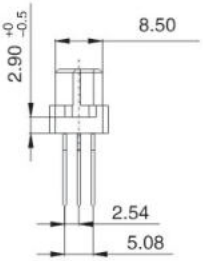
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

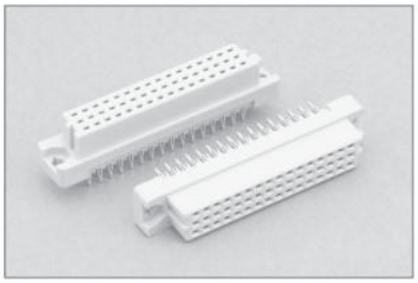
NO. OF CONTACTS		96	64	48	32
POSITION		a+b+c	a+c	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER			
5.0 mm	III	126–1–966–50–10	126–1–644–50–10	126–3–486–50–10	126–3–324–50–10
	II	126–1–966–50–20	126–1–644–50–20	126–3–486–50–20	126–3–324–50–20
13.0 mm	III	126–1–966–60–10	126–1–644–60–10	126–3–486–60–10	126–3–324–60–10
	II	126–1–966–60–20	126–1–644–60–20	126–3–486–60–20	126–3–324–60–20
17.0 mm	III	126–1–966–70–10	126–1–644–70–10	126–3–486–70–10	126–3–324–70–10
	II	126–1–966–70–20	126–1–644–70–20	126–3–486–70–20	126–3–324–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

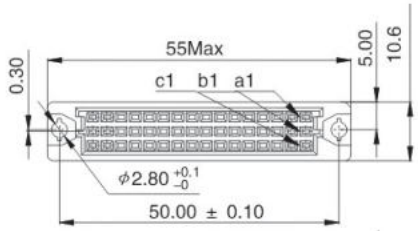
Vertical Female Type Half C Compliant Press–Fit Connectors 48 Positions

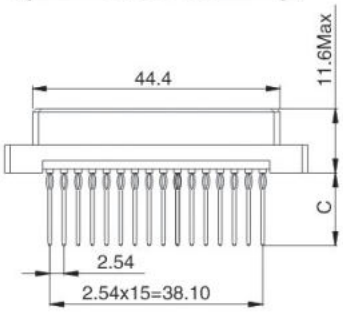


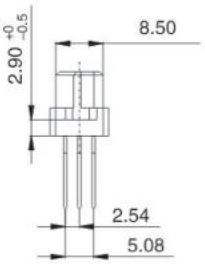
Option:

- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

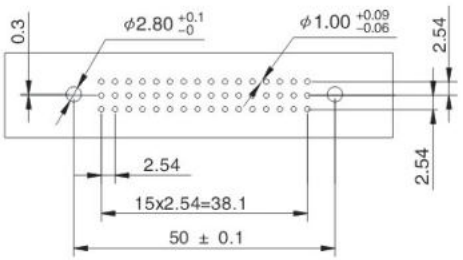
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

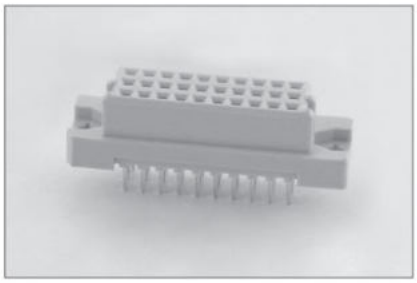
NO. OF CONTACTS		48	32	16
POSITION		a+b+c	a+c	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
5.0 mm	III	126–1–486–50–10	126–1–324–50–10	126–3–164–50–10
	II	126–1–486–50–20	126–1–324–50–20	126–3–164–50–20
13.0 mm	III	126–1–486–60–10	126–1–324–60–10	126–3–164–60–10
	II	126–1–486–60–20	126–1–324–60–20	126–3–164–60–20
17.0 mm	III	126–1–486–70–10	126–1–324–70–10	126–3–164–70–10
	II	126–1–486–70–20	126–1–324–70–20	126–3–164–70–20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type 1/3C Compliant Press–Fit Connectors 30 Positions

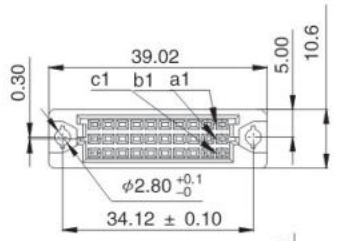


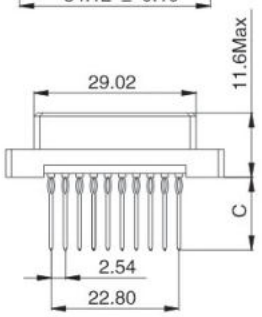
Option:

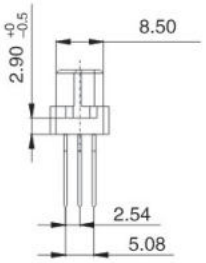
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

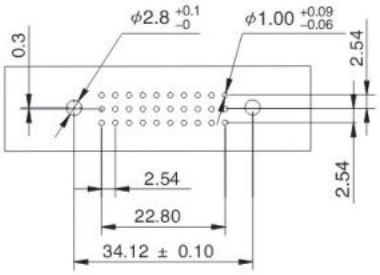
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

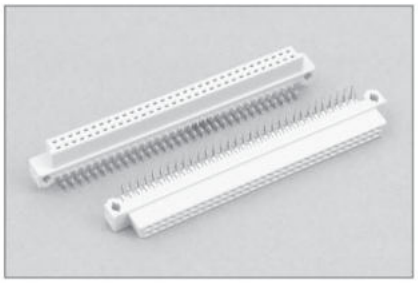
NO. OF CONTACTS		30	20	10
POSITION		a+b+c	a+c	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
5.0 mm	III	126–1–306–50–10	126–1–204–50–10	126–3–104–50–10
	II	126–1–306–50–20	126–1–204–50–20	126–3–104–50–20
13.0 mm	III	126–1–306–60–10	126–1–204–60–10	126–3–104–60–10
	II	126–1–306–60–20	126–1–204–60–20	126–3–104–60–20
17.0 mm	III	126–1–306–70–10	126–1–204–70–10	126–3–104–70–10
	II	126–1–306–70–20	126–1–204–70–20	126–3–104–70–20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

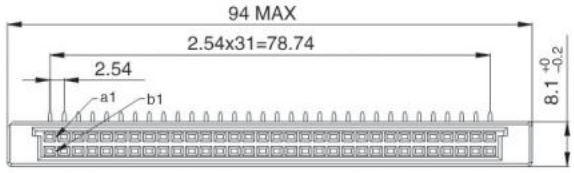
Right Angle Female Type Q Connectors–Inversed 64 Positions



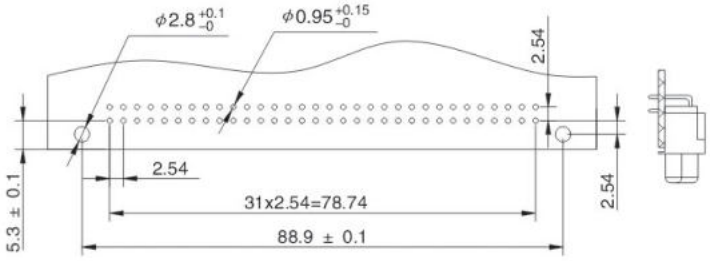
Option:

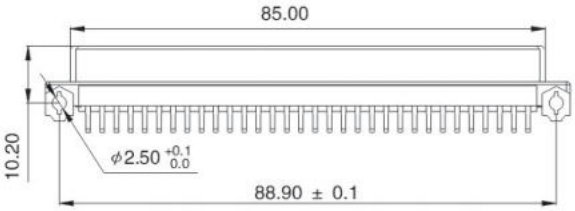
- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

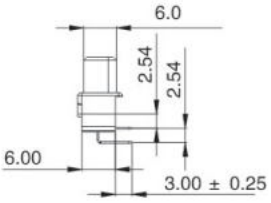
Dimensions

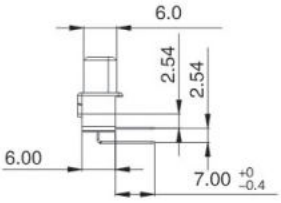


Recommended P.C.B. layout







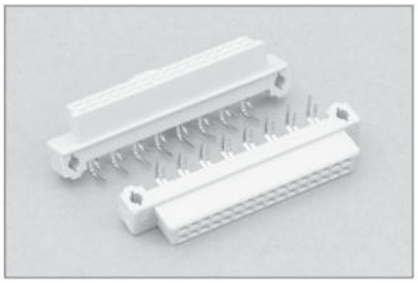


Ordering Information

NO. OF CONTACTS		64	32	32	16
POSITION		a+b	a	a+b (2.4.6....)	a (2.4.6....)
TERMINATION	QUALITY	Part Number			
3.0 mm	III	130–1–643–20–10	130–1–321–20–10	130–3–323–20–10	130–3–161–20–10
	II	130–1–643–20–20	130–1–321–20–20	130–3–323–20–20	130–3–161–20–20
7.0 mm	III	130–1–643–17–10	130–1–321–17–10	130–3–323–17–10	130–3–161–17–10
	II	130–1–643–17–20	130–1–321–17–20	130–3–323–17–20	130–3–161–17–20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

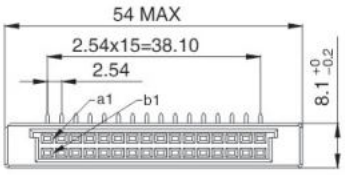
Right Angle Female Type Half Q Connectors–Inversed 32 Positions



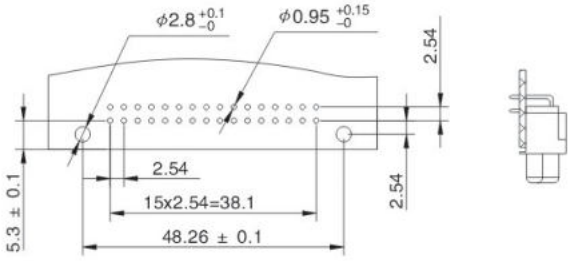
Option:

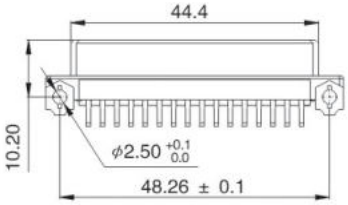
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

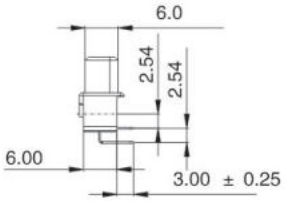
Dimensions

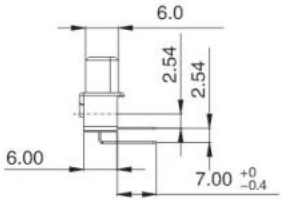


Recommended P.C.B. layout







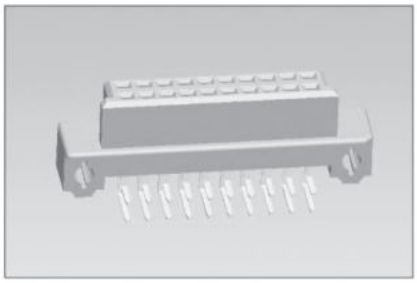


Ordering Information

NO. OF CONTACTS		32	16	16
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
3.0 mm	III	130–1–323–20–10	130–1–161–20–10	130–3–163–20–10
	II	130–1–323–20–20	130–1–161–20–20	130–3–163–20–20
7.0 mm	III	130–1–323–17–10	130–1–161–17–10	130–3–163–17–10
	II	130–1–323–17–20	130–1–161–17–20	130–3–163–17–20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Female Type 1/3 Q Connectors–Inversed 20 Positions

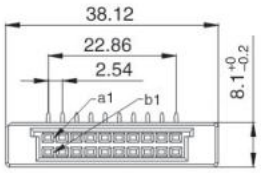


Option:

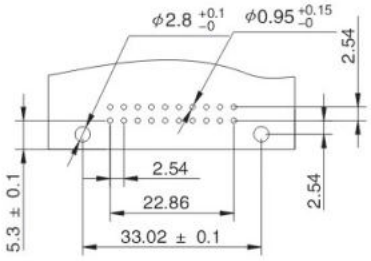
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

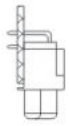
NEW

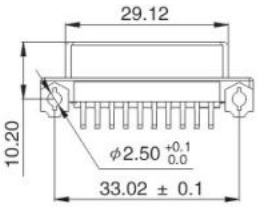
Dimensions

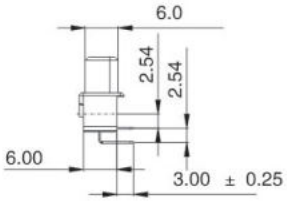


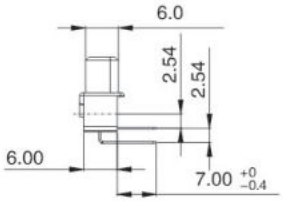
Recommended P.C.B. layout









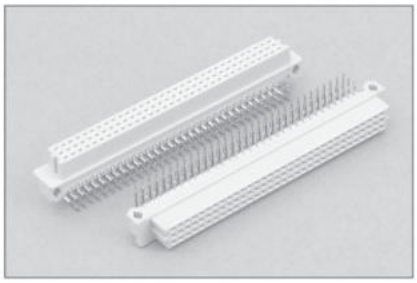


Ordering Information

NO. OF CONTACTS		20	10	10
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
3.0 mm	III	130–1–203–20–10	130–1–101–20–10	130–3–103–20–10
	II	130–1–203–20–20	130–1–101–20–20	130–3–103–20–20
7.0 mm	III	130–1–203–17–10	130–1–101–17–10	130–3–103–17–10
	II	130–1–203–17–20	130–1–101–17–20	130–3–103–17–20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

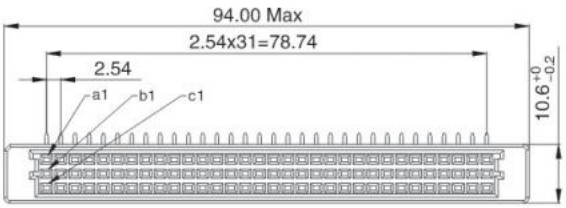
Right Angle Female Type R Connectors 96 Positions



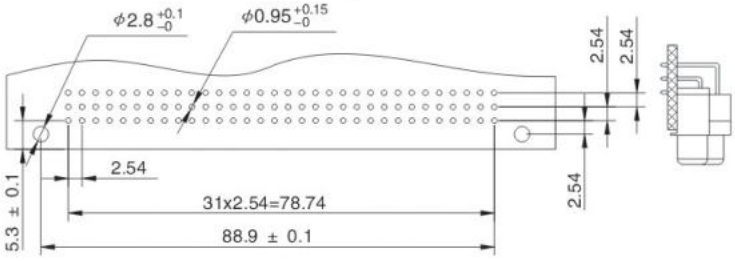
Option:

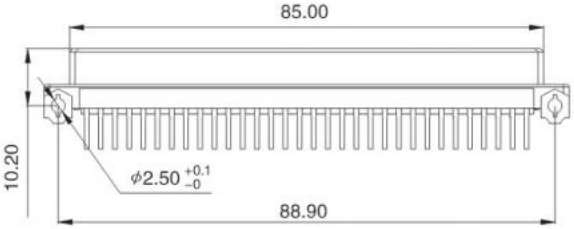
- Connector with pre-installed snap-in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

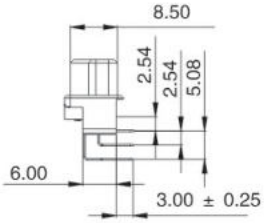
Dimensions

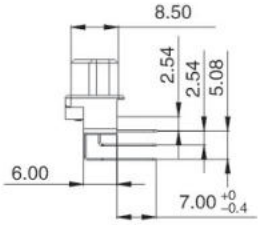


Recommended P.C.B. layout







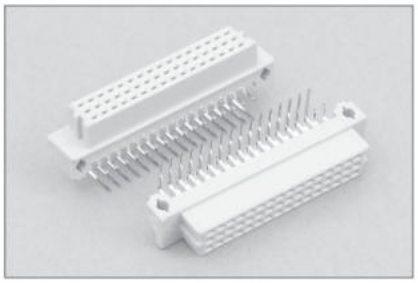


Ordering Information

NO. OF CONTACTS		96	64	64	32	48	32
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	131-1-966-20-10	131-1-644-20-10	131-1-643-20-10	131-1-321-20-10	131-3-486-20-10	131-3-324-20-10
	II	131-1-966-20-20	131-1-644-20-20	131-1-643-20-20	131-1-321-20-20	131-3-486-20-20	131-3-324-20-20
7.0 mm	III	131-1-966-17-10	131-1-644-17-10	131-1-643-17-10	131-1-321-17-10	131-3-486-17-10	131-3-324-17-10
	II	131-1-966-17-20	131-1-644-17-20	131-1-643-17-20	131-1-321-17-20	131-3-486-17-20	131-3-324-17-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

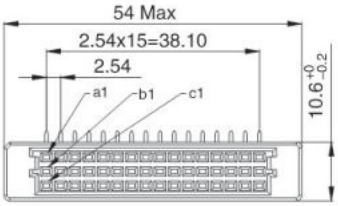
Right Angle Female Type Half R Connectors 48 Positions



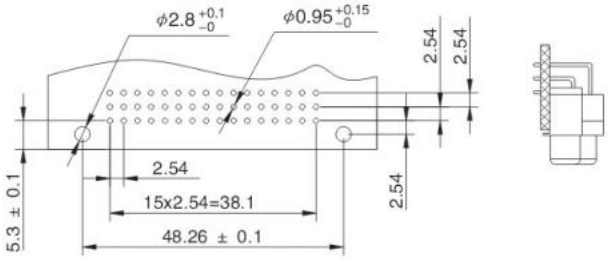
Option:

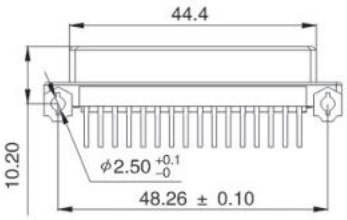
- Connector with pre-installed snap-in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

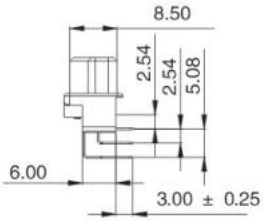
Dimensions

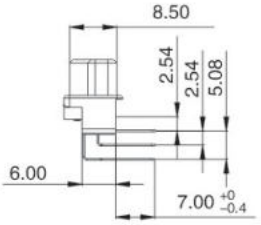


Recommended P.C.B. layout







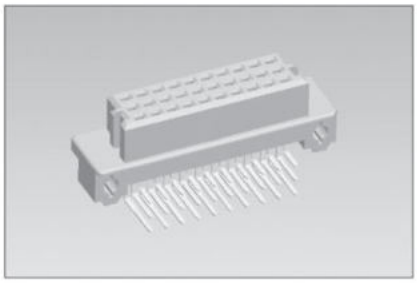


Ordering Information

NO. OF CONTACTS		48	32	32	16	24	16
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	131-1-486-20-10	131-1-324-20-10	131-1-323-20-10	131-1-161-20-10	131-3-246-20-10	131-3-164-20-10
	II	131-1-486-20-20	131-1-324-20-20	131-1-323-20-20	131-1-161-20-20	131-3-246-20-20	131-3-164-20-20
7.0 mm	III	131-1-486-17-10	131-1-324-17-10	131-1-323-17-10	131-1-161-17-10	131-3-246-17-10	131-3-164-17-10
	II	131-1-486-17-20	131-1-324-17-20	131-1-323-17-20	131-1-161-17-20	131-3-246-17-20	131-3-164-17-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Female Type 1/3 R Connectors 30 Positions

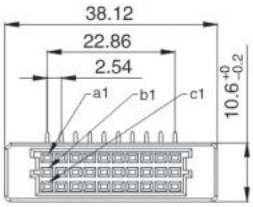


NEW

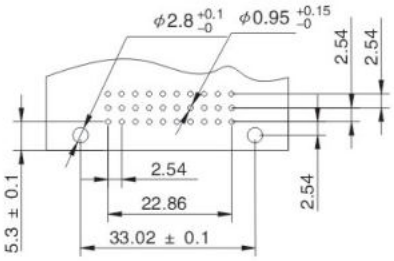
Option:

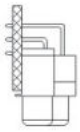
- Connector with pre-installed snap-in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

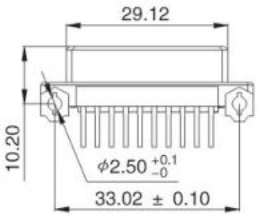
Dimensions

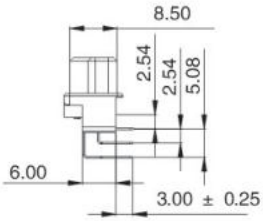


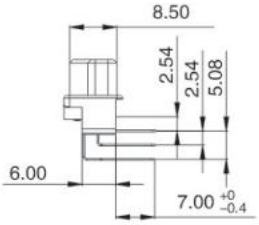
Recommended P.C.B. layout











Ordering Information

NO. OF CONTACTS		30	20	20	10	15	10
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	131-1-306-20-10	131-1-204-20-10	131-1-203-20-10	131-1-101-20-10	131-3-156-20-10	131-3-104-20-10
	II	131-1-306-20-20	131-1-204-20-20	131-1-203-20-20	131-1-101-20-20	131-3-156-20-20	131-3-104-20-20
7.0 mm	III	131-1-306-17-10	131-1-204-17-10	131-1-203-17-10	131-1-101-17-10	131-3-156-17-10	131-3-104-17-10
	II	131-1-306-17-20	131-1-204-17-20	131-1-203-17-20	131-1-101-17-20	131-3-156-17-20	131-3-104-17-20

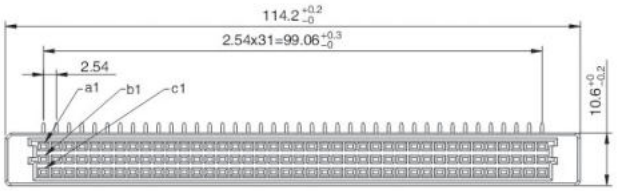
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Female Extended (120 Position) Type R Connectors

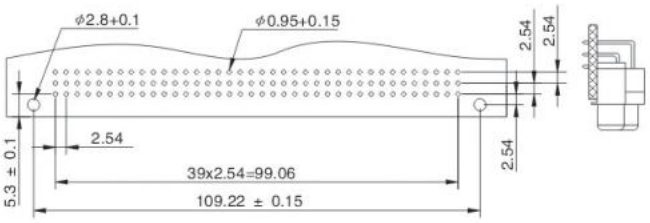
Option:

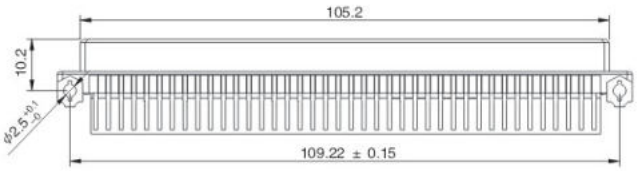
- Connector with pre-installed snap-in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

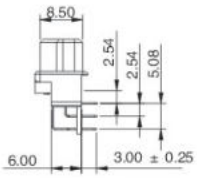
Dimensions

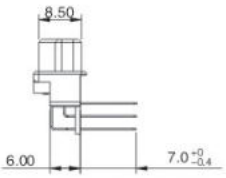


Recommended P.C.B. layout







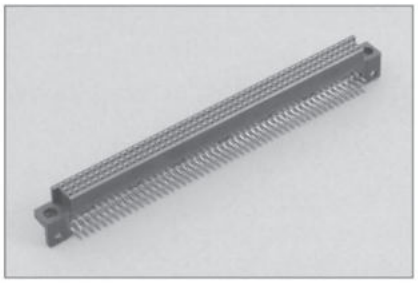


Ordering Information

NO. OF CONTACTS		120	80	80	40	60	40
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	131-1-1206-20-10	131-1-804-20-10	131-1-803-20-10	131-1-401-20-10	131-3-606-20-10	131-3-404-20-10
	II	131-1-1206-20-20	131-1-804-20-20	131-1-803-20-20	131-1-401-20-20	131-3-606-20-20	131-3-404-20-20
7.0 mm	III	131-1-1206-17-10	131-1-804-17-10	131-1-803-17-10	131-1-401-17-10	131-3-606-17-10	131-3-404-17-10
	II	131-1-1206-17-20	131-1-804-17-20	131-1-803-17-20	131-1-401-17-20	131-3-606-17-20	131-3-404-17-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

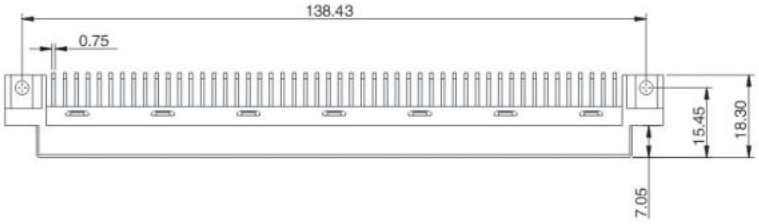
Vertical Female Type R Connectors 150 Position

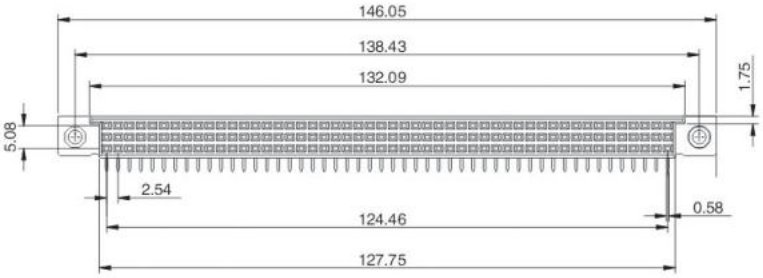


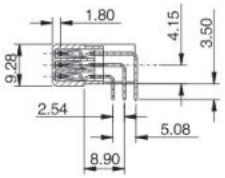
Option:

- HOUSING:PPS,UL94–V0,COLOR :BLACK .
- CONTACT:PHOSPHOR BRONZE
- Please refer to page 48 for complete part number coding
- Connector with through threaded hole mounting method
- Other variations, please consult factory

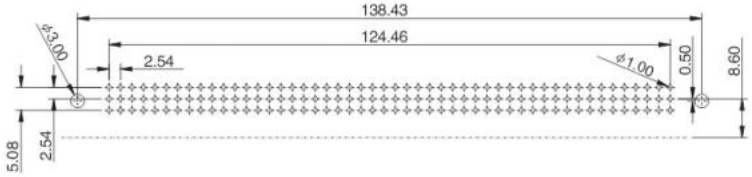
Dimensions







Recommended P.C.B. layout

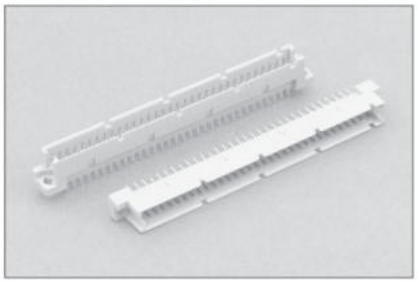


Ordering Information

NO. OF CONTACTS		150
POSITION		a+b+c
TERMINATION	QUALITY	PART NUMBER
3.50 mm	II	131–1–150–6–25–20
3.50 mm	III	131–1–150–6–25–10

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

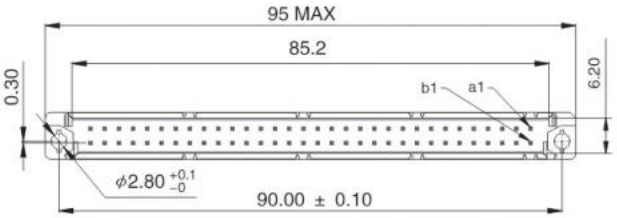
Vertical Male Type Q Connectors–Inversed 64 Positions



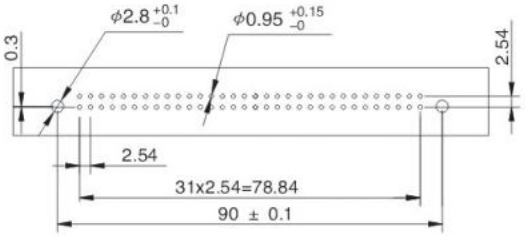
Option:

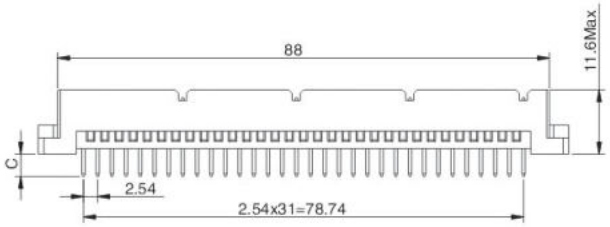
- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

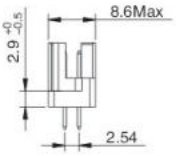
Dimensions



Recommended P.C.B. layout







CODE NO.	10	12	30	40
C =	2.5	4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

NO. OF CONTACTS		64	32	32	16
POSITION		a+b	a	a+b (2.4.6....)	a(2.4.6....)
TERMINATION	QUALITY	PART NUMBER			
2.5 mm	III	130–2–643–10–10	130–2–321–10–10	130–4–323–10–10	130–4–161–10–10
	II	130–2–643–10–20	130–2–321–10–20	130–4–323–10–20	130–4–161–10–20
4.0 mm	III	130–2–643–12–10	130–2–321–12–10	130–4–323–12–10	130–4–161–12–10
	II	130–2–643–12–20	130–2–321–12–20	130–4–323–12–20	130–4–161–12–20
13.0 mm	III	130–2–643–30–10	130–2–321–30–10	130–4–323–30–10	130–4–161–30–10
	II	130–2–643–30–20	130–2–321–30–20	130–4–323–30–20	130–4–161–30–20
17.0 mm	III	130–2–643–40–10	130–2–321–40–10	130–4–323–40–10	130–4–161–40–10
	II	130–2–643–40–20	130–2–321–40–20	130–4–323–40–20	130–4–161–40–20

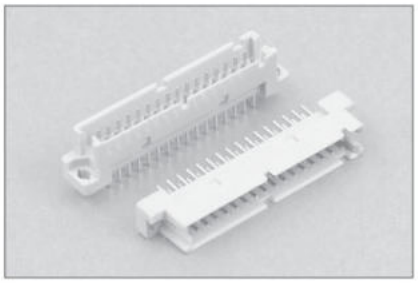
Remarks:

10–––Straight solder,tail length 2.5mm
12–––Straight solder,4mm tail length
30–––Straight Wrap post 13.0mm tail length
40–––Straight Wrap post 17.0mm tail length

T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

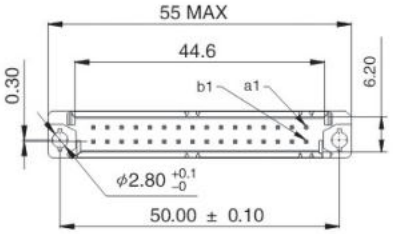
Vertical Male Type Half Q Connectors–Inversed 32 Positions

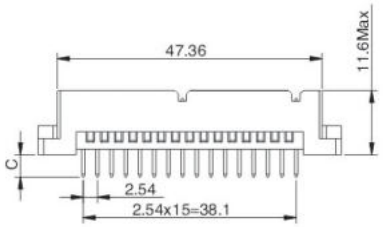


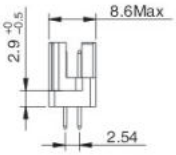
Option:

- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

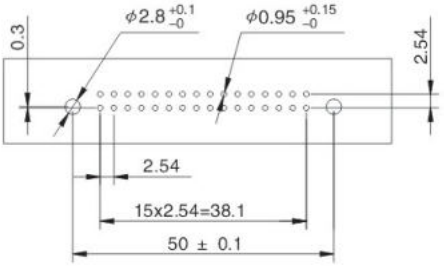
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4	5
T =	0.6x0.6	0.6x0.6	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

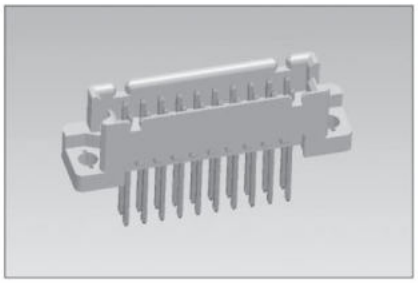
NO. OF CONTACTS		32	16	16
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
2.5 mm	III	130–2–323–10–10	130–2–161–10–10	130–4–163–10–10
	II	130–2–323–10–20	130–2–161–10–20	130–4–163–10–20
4.0 mm	III	130–2–323–12–10	130–2–161–12–10	130–4–163–12–10
	II	130–2–323–12–20	130–2–161–12–20	130–4–163–12–20
5.0 mm	III	130–2–323–14–10	130–2–161–14–10	130–4–163–14–10
	II	130–2–323–14–20	130–2–161–14–20	130–4–163–14–20
7.4 mm	III	130–2–323–15–10	130–2–161–15–10	130–4–163–15–10
	II	130–2–323–15–20	130–2–161–15–20	130–4–163–15–20
13.0 mm	III	130–2–323–30–10	130–2–161–30–10	130–4–163–30–10
	II	130–2–323–30–20	130–2–161–30–20	130–4–163–30–20
17.0 mm	III	130–2–323–40–10	130–2–161–40–10	130–4–163–40–10
	II	130–2–323–40–20	130–2–161–40–20	130–4–163–40–20

Remarks:

10–––Straight solder,tail length 2.5mm
12–––Straight solder,tail length 4mm
14–––Straight tail length 5mm
15–––Straight tail length 7.4mm
30–––Wrap post tail length 13.0mm
40–––Wrap post tail length 17.0mm
T–––Cross section of wrap post(Thickness x Width)
*–0.64mmx0.64mm on request,please consult factory.

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Male Type 1/3 Q Connectors–Inversed 20 Positions

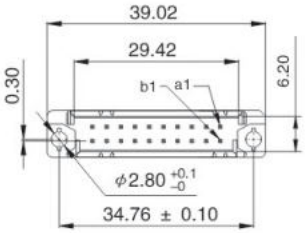


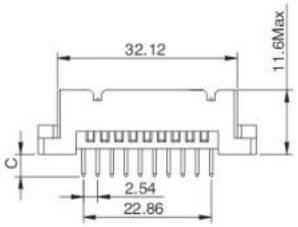
Option:

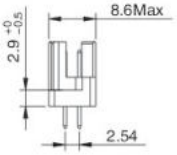
- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

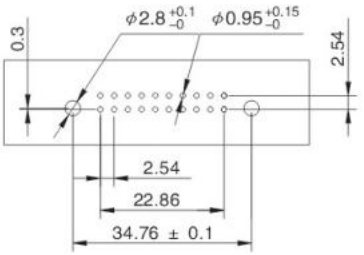
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4	5
T =	0.6x0.6	0.6x0.6	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

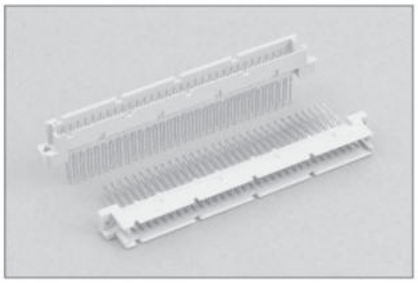
NO. OF CONTACTS		20	10	10
POSITION		a+b	a	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
2.5 mm	III	130–2–203–10–10	130–2–101–10–10	130–4–103–10–10
	II	130–2–203–10–20	130–2–101–10–20	130–4–103–10–20
4.0 mm	III	130–2–203–12–10	130–2–101–12–10	130–4–103–12–10
	II	130–2–203–12–20	130–2–101–12–20	130–4–103–12–20
5.0 mm	III	130–2–203–14–10	130–2–101–14–10	130–4–103–14–10
	II	130–2–203–14–20	130–2–101–14–20	130–4–103–14–20
7.4 mm	III	130–2–203–15–10	130–2–101–15–10	130–4–103–15–10
	II	130–2–203–15–20	130–2–101–15–20	130–4–103–15–20
13.0 mm	III	130–2–203–30–10	130–2–101–30–10	130–4–103–30–10
	II	130–2–203–30–20	130–2–101–30–20	130–4–103–30–20
17.0 mm	III	130–2–203–40–10	130–2–101–40–10	130–4–103–40–10
	II	130–2–203–40–20	130–2–101–40–20	130–4–103–40–20

Remarks:

10–––Straight solder,tail length 2.5mm
12–––Straight solder,tail length 4mm
14–––Straight tail length 5mm
15–––Straight tail length 7.4mm
30–––Wrap post tail length 13.0mm
40–––Wrap post tail length 17.0mm
T–––Cross section of wrap post(Thickness x Width)
*–0.64mmx0.64mm on request,please consult factory.

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

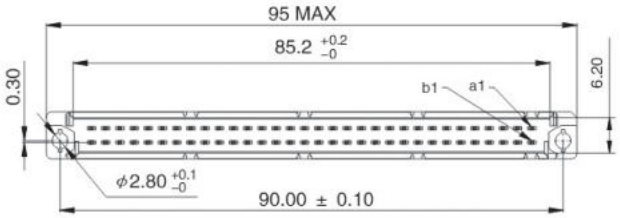
Vertical Male Type Q Compliant Press–Fit Connectors 64 positions



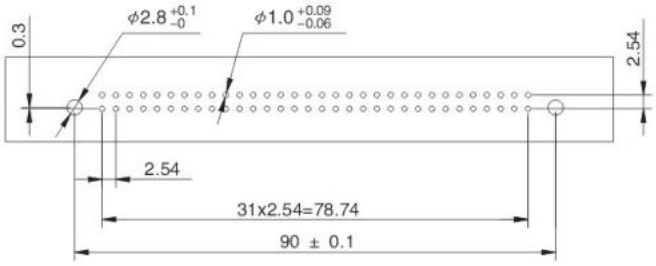
Option:

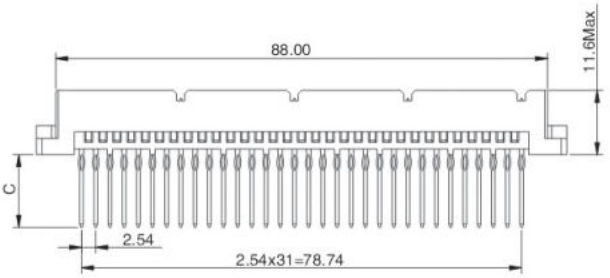
- Extended male contact
- Coded connector
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

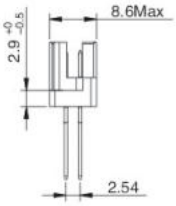
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

NO. OF CONTACTS		64	32
POSITION		a+b	a+b (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	130–2–643–50–10	130–4–323–50–10
	II	130–2–643–50–20	130–4–323–50–20
13.0 mm	III	130–2–643–60–10	130–4–323–60–10
	II	130–2–643–60–20	130–4–323–60–20
17.0 mm	III	130–2–643–70–10	130–4–323–70–10
	II	130–2–643–70–20	130–4–323–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

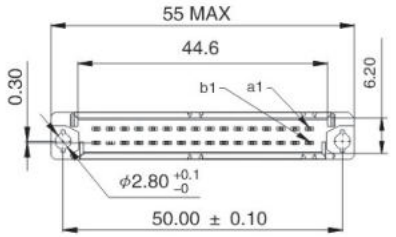
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

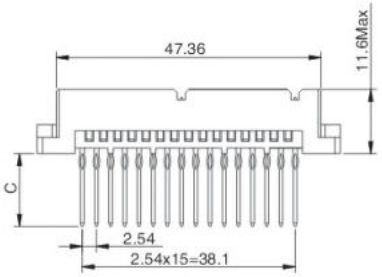
Vertical Male Type Half Q Compliant Press–Fit Connectors 32 positions

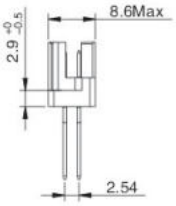
Option:

- Extended male contact
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

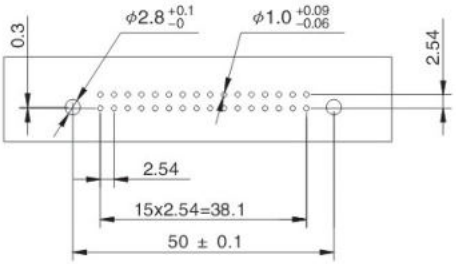
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

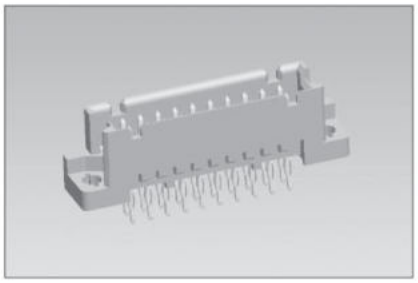
NO. OF CONTACTS		32	16
POSITION		a+b	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	130–2–323–50–10	130–4–163–50–10
	II	130–2–323–50–20	130–4–163–50–20
13.0 mm	III	130–2–323–60–10	130–4–163–60–10
	II	130–2–323–60–20	130–4–163–60–20
17.0 mm	III	130–2–323–70–10	130–4–163–70–10
	II	130–2–323–70–20	130–4–163–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Male Type 1/3 Q Compliant Press–Fit Connectors 20 positions

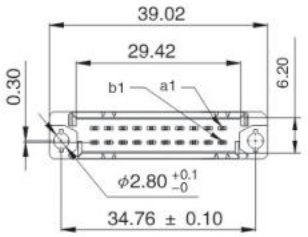


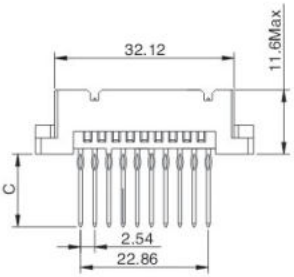
Option:

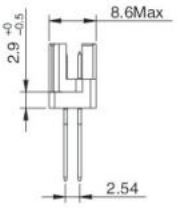
- Extended male contact
- Please refer to page 45 for complete part number coding
- Other variations, please consult factory

NEW

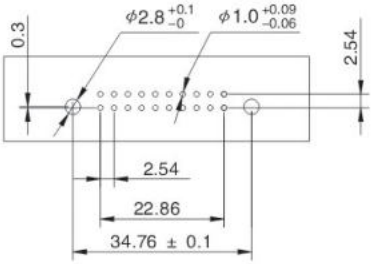
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

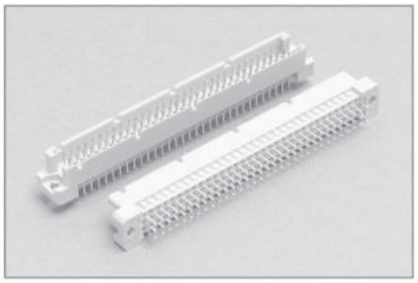
NO. OF CONTACTS		20	10
POSITION		a+b	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER	
5.0 mm	III	130–2–203–50–10	130–4–103–50–10
	II	130–2–203–50–20	130–4–103–50–20
13.0 mm	III	130–2–203–60–10	130–4–103–60–10
	II	130–2–203–60–20	130–4–103–60–20
17.0 mm	III	130–2–203–70–10	130–4–103–70–10
	II	130–2–203–70–20	130–4–103–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length
60–––Straight press–fit 13.0mm tail length
70–––Straight press–fit 17.0mm tail length
T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

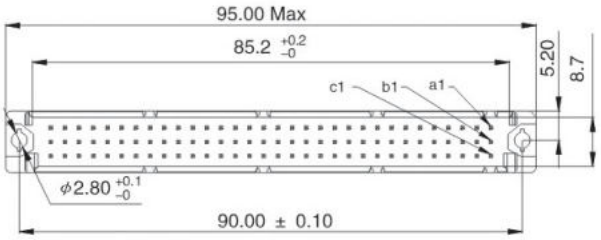
Vertical Male Type R Connectors–Inversed 96 Positions



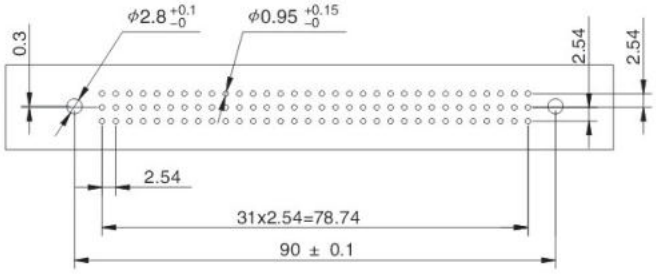
Option:

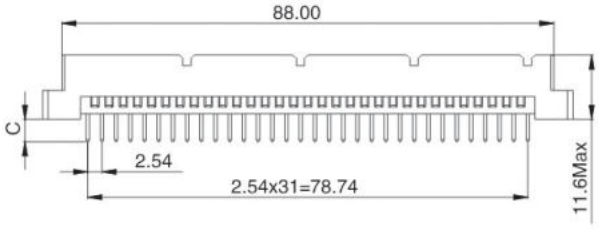
- Extended male contact
- connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

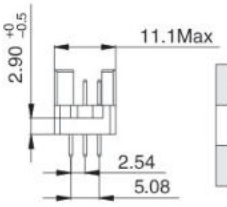
Dimensions



Recommended P.C.B. layout







CODE NO.	10	12	30	40
C =	2.5	4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

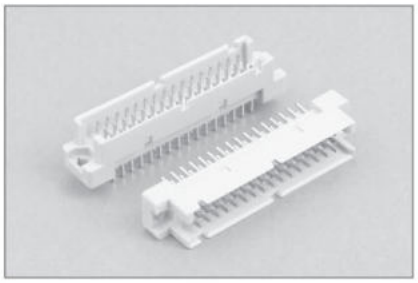
NO. OF CONTACTS		96	64	64	32	48	32
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	131-2-966-10-10	131-2-644-10-10	131-2-643-10-10	131-2-321-10-10	131-4-486-10-10	131-4-324-10-10
	II	131-2-966-10-20	131-2-644-10-20	131-2-643-10-20	131-2-321-10-20	131-4-486-10-20	131-4-324-10-20
4.0 mm	III	131-2-966-12-10	131-2-644-12-10	131-2-643-12-10	131-2-321-12-10	131-4-486-12-10	131-4-324-12-10
	II	131-2-966-12-20	131-2-644-12-20	131-2-643-12-20	131-2-321-12-20	131-4-486-12-20	131-4-324-12-20
13.0 mm	III	131-2-966-30-10	131-2-644-30-10	131-2-643-30-10	131-2-321-30-10	131-4-486-30-10	131-4-324-30-10
	II	131-2-966-30-20	131-2-644-30-20	131-2-643-30-20	131-2-321-30-20	131-4-486-30-20	131-4-324-30-20
17.0 mm	III	131-2-966-40-10	131-2-644-40-10	131-2-643-40-10	131-2-321-40-10	131-4-486-40-10	131-4-324-40-10
	II	131-2-966-40-20	131-2-644-40-20	131-2-643-40-20	131-2-321-40-20	131-4-486-40-20	131-4-324-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)
*---0.64mmx0.64mm on request,please consult factory

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

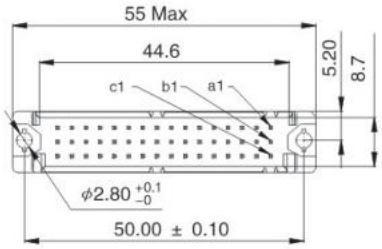
Vertical Male Type Half R Connectors–Inversed 48 Positions

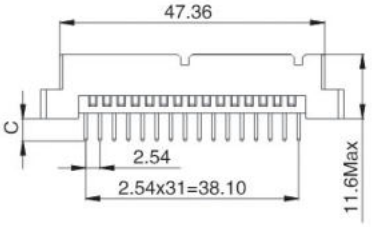


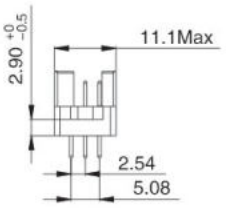
Option:

- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

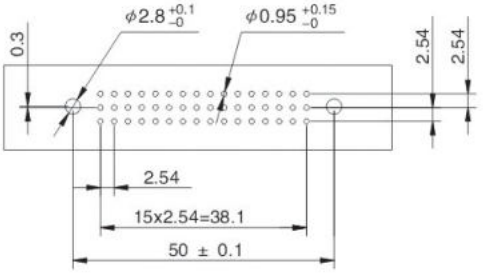
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4	5
T =	0.6x0.6	0.6x0.6	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

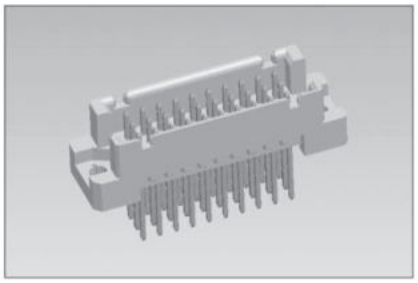
NO. OF CONTACTS		48	32	32	16	24	16
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6...)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	131-2-486-10-10	131-2-324-10-10	131-2-323-10-10	131-2-161-10-10	131-4-246-10-10	131-4-164-10-10
	II	131-2-486-10-20	131-2-324-10-20	131-2-323-10-20	131-2-161-10-20	131-4-246-10-20	131-4-164-10-20
4.0 mm	III	131-2-486-12-10	131-2-324-12-10	131-2-323-12-10	131-2-161-12-10	131-4-246-12-10	131-4-164-12-10
	II	131-2-486-12-20	131-2-324-12-20	131-2-323-12-20	131-2-161-12-20	131-4-246-12-20	131-4-164-12-20
5.0 mm	III	131-2-486-14-10	131-2-324-14-10	131-2-323-14-10	131-2-161-14-10	131-4-246-14-10	131-4-164-14-10
	II	131-2-486-14-20	131-2-324-14-20	131-2-323-14-20	131-2-161-14-20	131-4-246-14-20	131-4-164-14-20
7.4 mm	III	131-2-486-15-10	131-2-324-15-10	131-2-323-15-10	131-2-161-15-10	131-4-246-15-10	131-4-164-15-10
	II	131-2-486-15-20	131-2-324-15-20	131-2-323-15-20	131-2-161-15-20	131-4-246-15-20	131-4-164-15-20
13.0 mm	III	131-2-486-30-10	131-2-324-30-10	131-2-323-30-10	131-2-161-30-10	131-4-246-30-10	131-4-164-30-10
	II	131-2-486-30-20	131-2-324-30-20	131-2-323-30-20	131-2-161-30-20	131-4-246-30-20	131-4-164-30-20
17.0 mm	III	131-2-486-40-10	131-2-324-40-10	131-2-323-40-10	131-2-161-40-10	131-4-246-40-10	131-4-164-40-10
	II	131-2-486-40-20	131-2-324-40-20	131-2-323-40-20	131-2-161-40-20	131-4-246-40-20	131-4-164-40-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
14---Straight tail length 5mm
15---Straight tail length 7.4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)
*---0.64mmx0.64mm on request,please cinsult factory.

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Male Type 1/3 R Connectors–Inversed 30 Positions

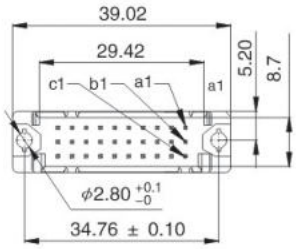


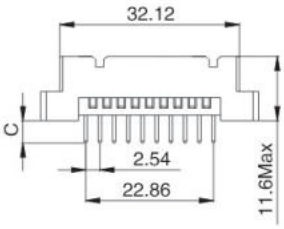
Option:

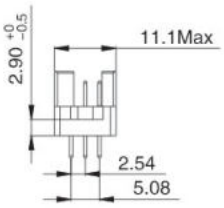
- Extended male contact
- Connector with pre–installed snap–in mounting clips.
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

NEW

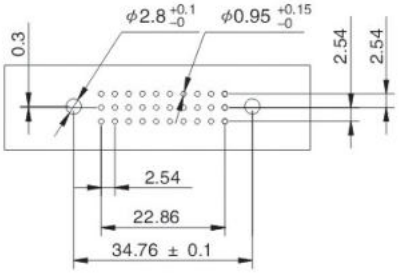
Dimensions







Recommended P.C.B. layout



CODE NO.	10	12	14
C =	2.5	4	5
T =	0.6x0.6	0.6x0.6	0.6x0.6
CODE NO.	15	30	40
C =	7.4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

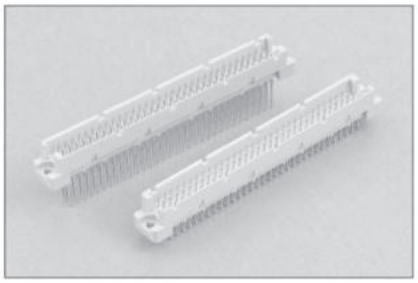
NO. OF CONTACTS		30	20	20	10	15	10
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6...)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	131-2-306-10-10	131-2-204-10-10	131-2-203-10-10	131-2-101-10-10	131-4-156-10-10	131-4-104-10-10
	II	131-2-306-10-20	131-2-204-10-20	131-2-203-10-20	131-2-101-10-20	131-4-156-10-20	131-4-104-10-20
4.0 mm	III	131-2-306-12-10	131-2-204-12-10	131-2-203-12-10	131-2-101-12-10	131-4-156-12-10	131-4-104-12-10
	II	131-2-306-12-20	131-2-204-12-20	131-2-203-12-20	131-2-101-12-20	131-4-156-12-20	131-4-104-12-20
5.0 mm	III	131-2-306-14-10	131-2-204-14-10	131-2-203-14-10	131-2-101-14-10	131-4-156-14-10	131-4-104-14-10
	II	131-2-306-14-20	131-2-204-14-20	131-2-203-14-20	131-2-101-14-20	131-4-156-14-20	131-4-104-14-20
7.4 mm	III	131-2-306-15-10	131-2-204-15-10	131-2-203-15-10	131-2-101-15-10	131-4-156-15-10	131-4-104-15-10
	II	131-2-306-15-20	131-2-204-15-20	131-2-203-15-20	131-2-161-15-20	131-4-156-15-20	131-4-104-15-20
13.0 mm	III	131-2-306-30-10	131-2-204-30-10	131-2-203-30-10	131-2-101-30-10	131-4-156-30-10	131-4-104-30-10
	II	131-2-306-30-20	131-2-204-30-20	131-2-203-30-20	131-2-101-30-20	131-4-156-30-20	131-4-104-30-20
17.0 mm	III	131-2-306-40-10	131-2-204-40-10	131-2-203-40-10	131-2-101-40-10	131-4-156-40-10	131-4-104-40-10
	II	131-2-306-40-20	131-2-204-40-20	131-2-203-40-20	131-2-101-40-20	131-4-156-40-20	131-4-104-40-20

Remarks:

10–––Straight solder,tail length 2.5mm
12–––Straight solder,tail length 4mm
14–––Straight tail length 5mm
15–––Straight tail length 7.4mm
30–––Wrap post tail length 13.0mm
40–––Wrap post tail length 17.0mm
T–––Cross section of wrap post(Thickness x Width)
*–––0.64mmx0.64mm on request,please cinsult factory.

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

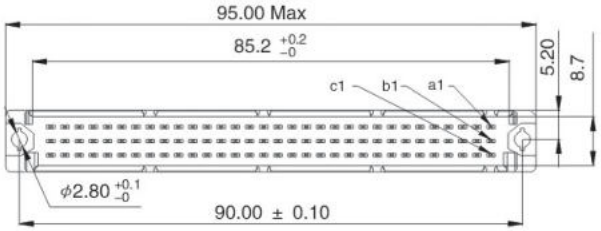
Vertical Male Type R Compliant Press–Fit Connectors 96 Positions



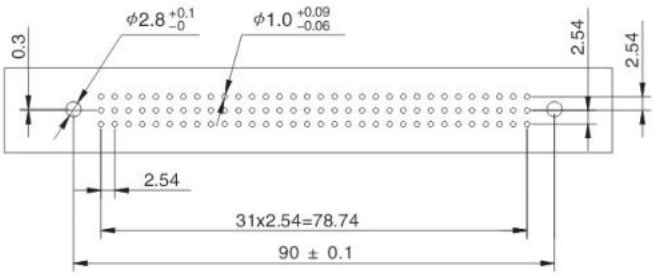
Option:

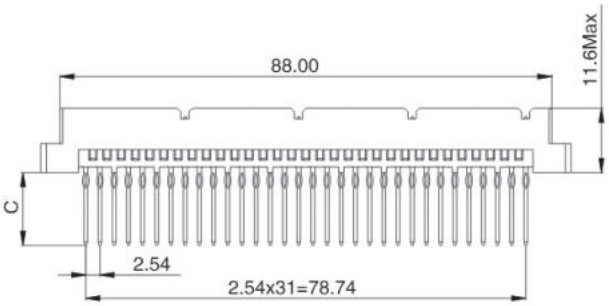
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

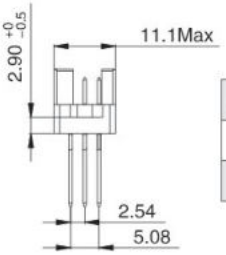
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

NO. OF CONTACTS		96	64	48	32
POSITION		a+b+c	a+c	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER			
5.0 mm	III	131–2–966–50–10	131–2–644–50–10	131–4–486–50–10	131–4–324–50–10
	II	131–2–966–50–20	131–2–644–50–20	131–4–486–50–20	131–4–324–50–20
13.0 mm	III	131–2–966–60–10	131–2–644–60–10	131–4–486–60–10	131–4–324–60–10
	II	131–2–966–60–20	131–2–644–60–20	131–4–486–60–20	131–4–324–60–20
17.0 mm	III	131–2–966–70–10	131–2–644–70–10	131–4–486–70–10	131–4–324–70–10
	II	131–2–966–70–20	131–2–644–70–20	131–4–486–70–20	131–4–324–70–20

Remarks:

50–––Straight press–fit 5.0mm tail length

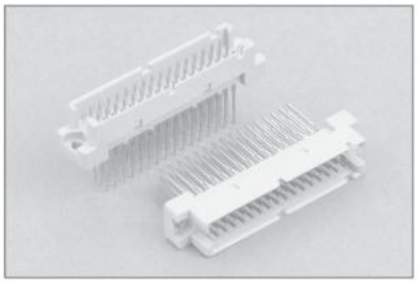
60–––Straight press–fit 13.0mm tail length

70–––Straight press–fit 17.0mm tail length

T–––Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

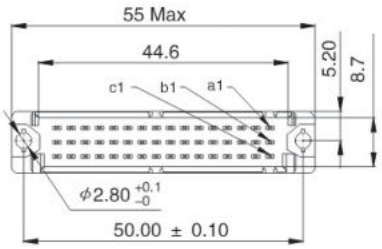
Vertical Male Type Half R Compliant Press–Fit Connectors 48 Positions

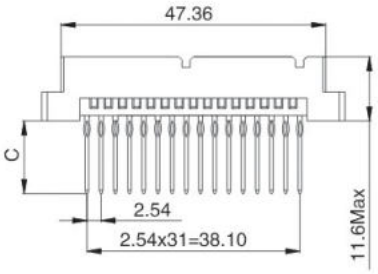


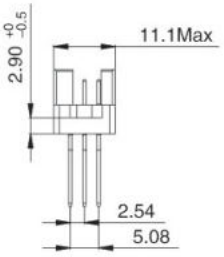
Option:

- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

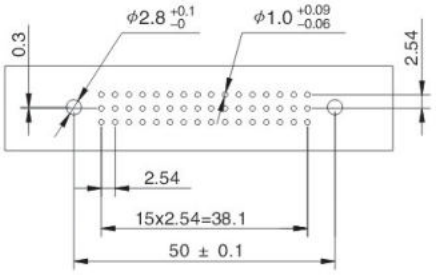
Dimensions







Recommended P.C.B. layout



CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

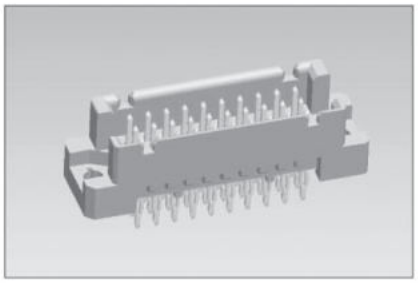
NO. OF CONTACTS		48	32	16
POSITION		a+b+c	a+c	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
5.0 mm	III	131–2–486–50–10	131–2–324–50–10	131–4–164–50–10
	II	131–2–486–50–20	131–2–324–50–20	131–4–164–50–20
13.0 mm	III	131–2–486–60–10	131–2–324–60–10	131–4–164–60–10
	II	131–2–486–60–20	131–2–324–60–20	131–4–164–60–20
17.0 mm	III	131–2–486–70–10	131–2–324–70–10	131–4–164–70–10
	II	131–2–486–70–20	131–2–324–70–20	131–4–164–70–20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Male Type 1/3 R Compliant Press–Fit Connectors 30 Positions

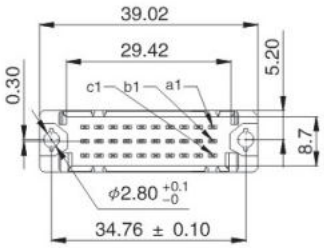


Option:

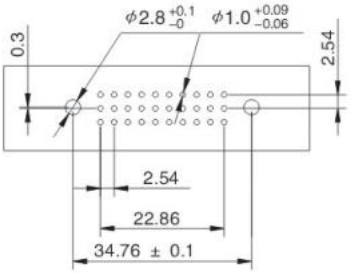
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

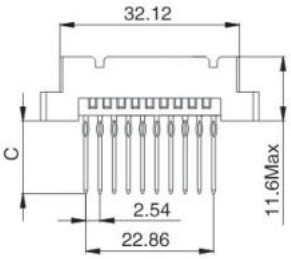
NEW

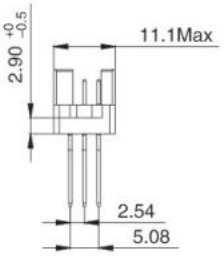
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

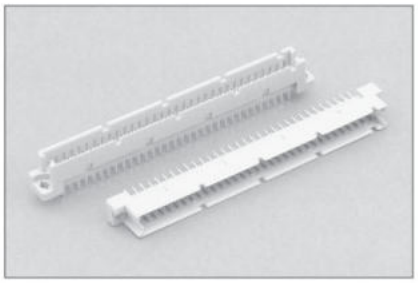
NO. OF CONTACTS		30	20	10
POSITION		a+b+c	a+c	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER		
5.0 mm	III	131–2–306–50–10	131–2–204–50–10	131–4–104–50–10
	II	131–2–306–50–20	131–2–204–50–20	131–4–104–50–20
13.0 mm	III	131–2–306–60–10	131–2–204–60–10	131–4–104–60–10
	II	131–2–306–60–20	131–2–204–60–20	131–4–104–60–20
17.0 mm	III	131–2–306–70–10	131–2–204–70–10	131–4–104–70–10
	II	131–2–306–70–20	131–2–204–70–20	131–4–104–70–20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

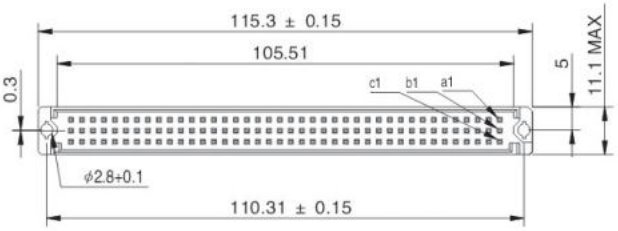
Vertical Male Extended Type R Solder type Connectors 120 Positions



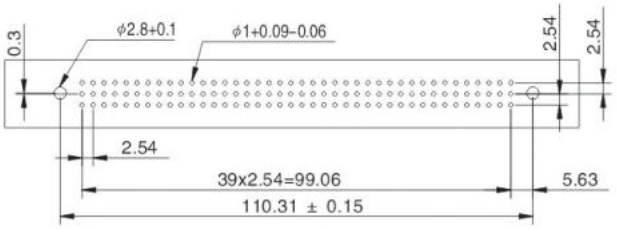
Option:

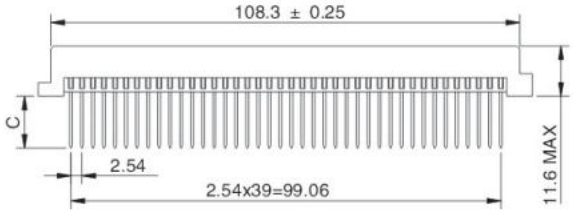
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

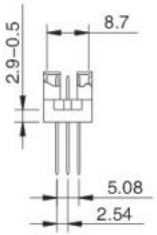
Dimensions



Recommended P.C.B. layout







CODE NO.	10	12	30	40
C =	2.5	4	13	17
T =	0.6x0.6	0.6x0.6	0.6x0.6	0.6x0.6

Ordering Information

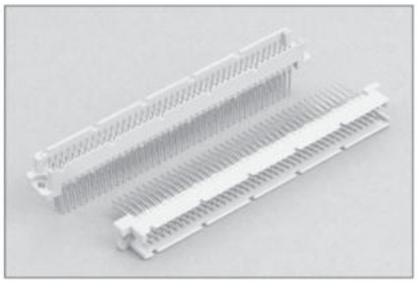
NO. OF CONTACTS		120	80	80	40	64	40
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
2.5 mm	III	131-2-1206-10-10	131-2-804-10-10	131-2-803-10-10	131-2-401-10-10	131-4-646-10-10	131-4-404-10-10
	II	131-2-1206-10-20	131-2-804-10-20	131-2-803-10-20	131-2-401-10-20	131-4-646-10-20	131-4-404-10-20
4.0 mm	III	131-2-1206-12-10	131-2-804-12-10	131-2-803-12-10	131-2-401-12-10	131-4-646-12-10	131-4-404-12-10
	II	131-2-1206-12-20	131-2-804-12-20	131-2-803-12-20	131-2-401-12-20	131-4-646-12-20	131-4-404-12-20
13.0 mm	III	131-2-1206-13-10	131-2-804-13-10	131-2-803-13-10	131-2-401-13-10	131-4-646-13-10	131-4-404-13-10
	II	131-2-1206-13-20	131-2-804-13-20	131-2-803-13-20	131-2-401-13-20	131-4-646-13-20	131-4-404-13-20
17.0 mm	III	131-2-1206-17-10	131-2-804-17-10	131-2-803-17-10	131-2-401-17-10	131-4-646-17-10	131-4-404-17-10
	II	131-2-1206-17-20	131-2-804-17-20	131-2-803-17-20	131-2-401-17-20	131-4-646-17-20	131-4-404-17-20

Remarks:

10---Straight solder,tail length 2.5mm
12---Straight solder,tail length 4mm
30---Wrap post tail length 13.0mm
40---Wrap post tail lenght 17.0mm
T---Cross section of wrap post(Thickness x Width)
*---0.64mmx0.64mm on request,please consult factory

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

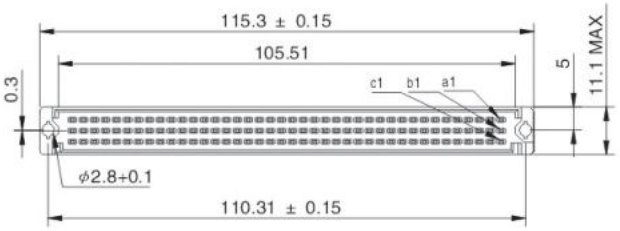
Vertical Male Extended Type R Press–Fit Connectors 120 Positions



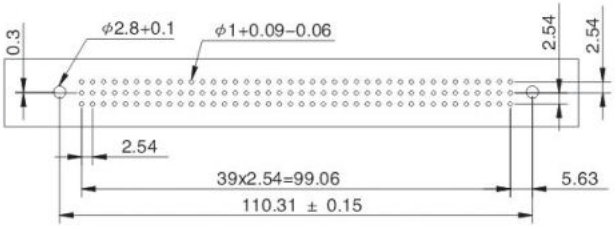
Option:

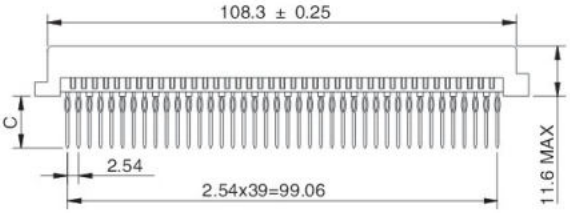
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

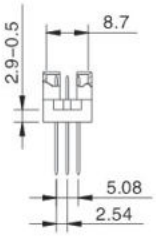
Dimensions



Recommended P.C.B. layout







CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

Ordering Information

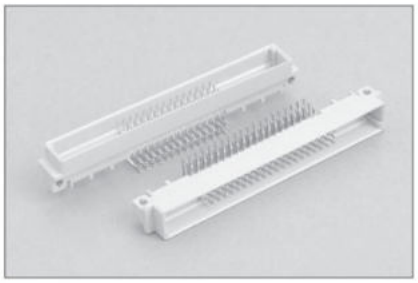
NO. OF CONTACTS		120	80	80	40	64	40
POSITION		a+b+c	a+c	a+b	a	a+b+c (2.4.6....)	a+c (2.4.6....)
TERMINATION	QUALITY	PART NUMBER					
5.0 mm	III	131-2-1206-50-10	131-2-804-50-10	131-2-803-50-10	131-2-401-50-10	131-4-646-50-10	131-4-404-50-10
	II	131-2-1206-50-20	131-2-804-50-20	131-2-803-50-20	131-2-401-50-20	131-4-646-50-20	131-4-404-50-20
13.0 mm	III	131-2-1206-60-10	131-2-804-60-10	131-2-803-60-10	131-2-401-60-10	131-4-646-60-10	131-4-404-60-10
	II	131-2-1206-60-20	131-2-804-60-20	131-2-803-60-20	131-2-401-60-20	131-4-646-60-20	131-4-404-60-20
17.0 mm	III	131-2-1206-70-10	131-2-804-70-10	131-2-803-70-10	131-2-401-70-10	131-4-646-70-10	131-4-404-70-10
	II	131-2-1206-70-20	131-2-804-70-20	131-2-803-70-20	131-2-401-70-20	131-4-646-70-20	131-4-404-70-20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

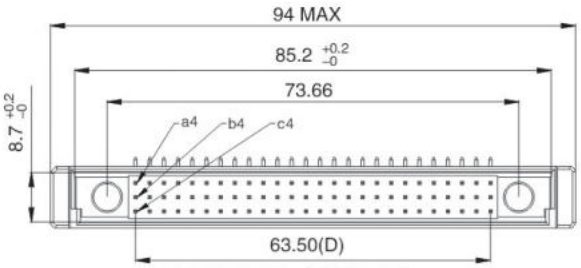
Right Angle Male Type M Connectors



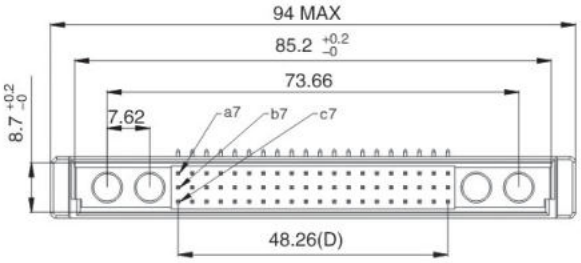
Option:

- Connector with pre–installed snap–in mounting clips.
- Coded connectors
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

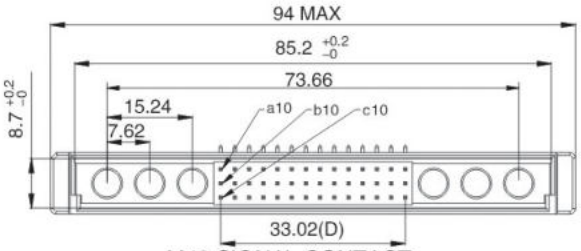
Dimensions



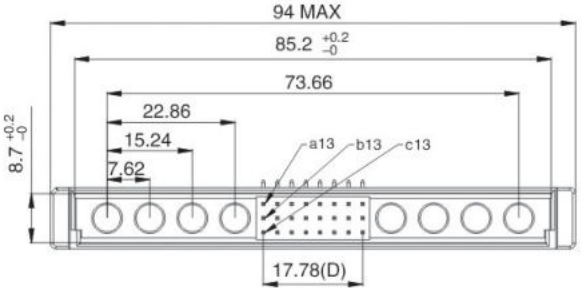
M78 SIGNAL CONTACT



M60 SIGNAL CONTACT

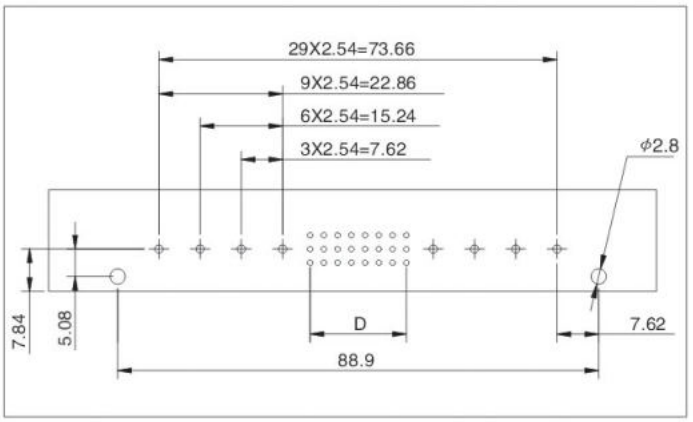


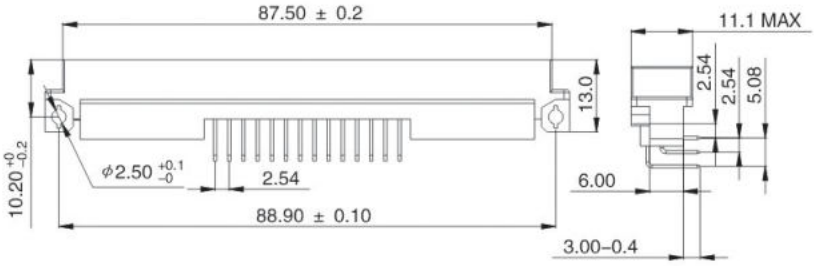
M42 SIGNAL CONTACT



M24 SIGNAL CONTACT

Recommended P.C.B. layout





Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

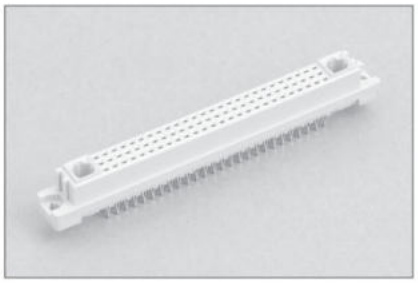
Right Angle Male Type M Connectors

Ordering Information

NO. OF CONTACTS		78+2	60+4	42+6	24+8
POSITION		a+b+c	a+b+c	a+b+c	a+b+c
TERMINATION	QUALITY	PART NUMBER			
3.0 mm	III	126-2-786-20-10	126-2-606-20-10	126-2-426-20-10	126-2-246-20-10
	II	126-2-786-20-20	126-2-606-20-20	126-2-426-20-20	126-2-246-20-20

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

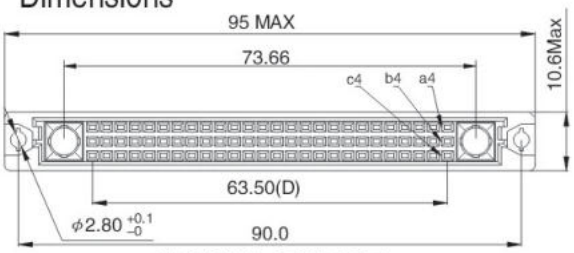
Vertical Female Type M Press–Fit Connectors



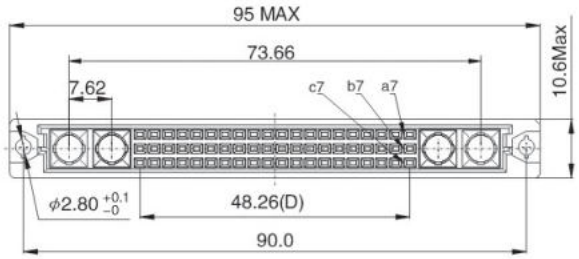
Option:

- Coded connectors
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

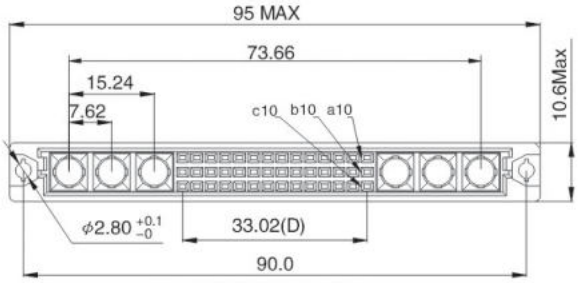
Dimensions



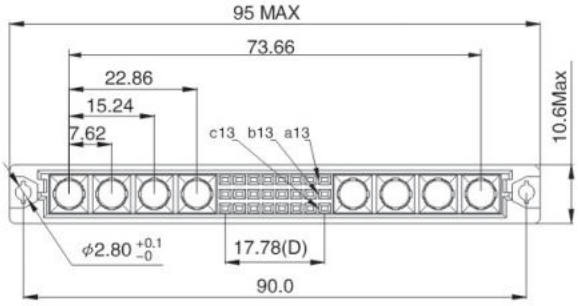
78 SIGNAL CONTACT



60 SIGNAL CONTACT

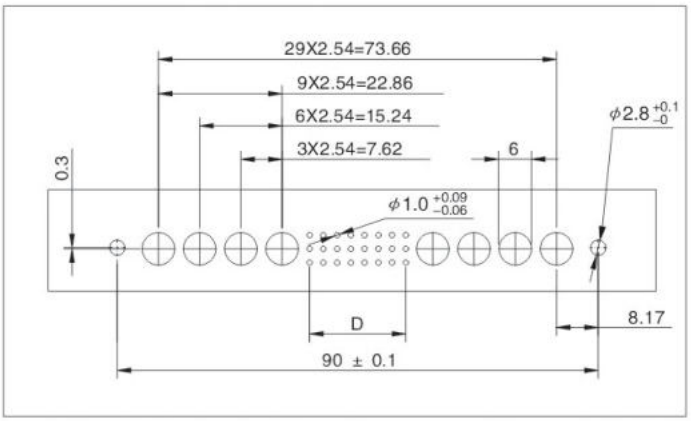


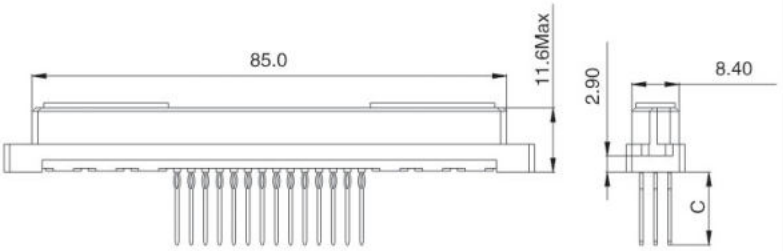
42 SIGNAL CONTACT



24 SIGNAL CONTACT

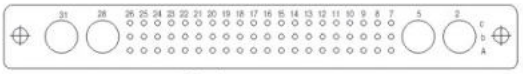
Recommended P.C.B. layout



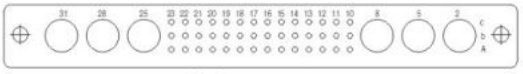


Contact arrangement
View from termination side

78+2



60+4



42+6

24+8

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type M Press–Fit Connectors

CODE NO.	50	60	70
C =	5	13	17
T =		0.6x0.6	0.6x0.6

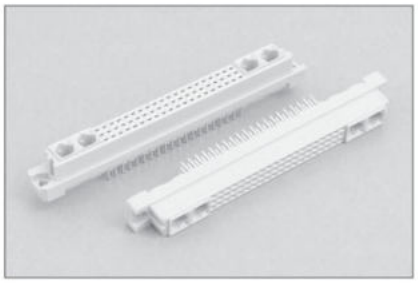
Ordering Information

NO. OF CONTACTS		78+2	60+4	42+6	24+8
POSITION		a+b+c	a+b+c	a+b+c	a+b+c
TERMINATION	QUALITY	PART NUMBER			
5.0 mm	III	126–1–786–50–10	126–1–606–50–10	126–1–426–50–10	126–1–246–50–10
	II	126–1–786–50–20	126–1–606–50–20	126–1–426–50–20	126–1–246–50–20
13.0 mm	III	126–1–786–60–10	126–1–606–60–10	126–1–426–60–10	126–1–246–60–10
	II	126–1–786–60–20	126–1–606–60–20	126–1–426–60–20	126–1–246–60–20
17.0 mm	III	126–1–786–70–10	126–1–606–70–10	126–1–426–70–10	126–1–246–70–10
	II	126–1–786–70–20	126–1–606–70–20	126–1–426–70–20	126–1–246–70–20

Remarks:

50---Straight press–fit 5.0mm tail length
60---Straight press–fit 13.0mm tail length
70---Straight press–fit 17.0mm tail length
T---Cross section of wrap post(Thickness x Width)

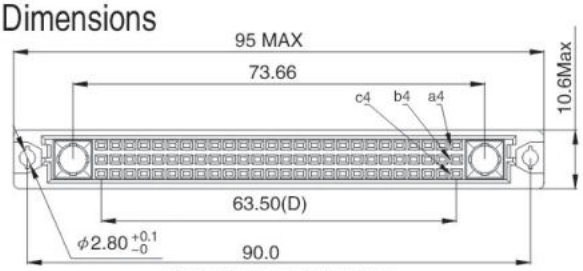
Vertical Female Type M Solder Connectors



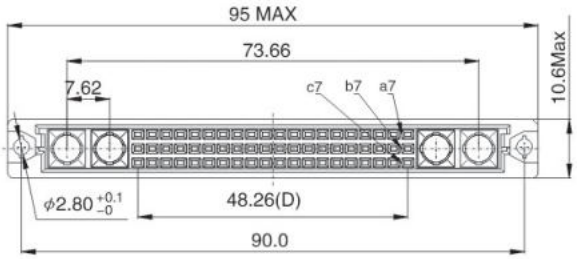
Option:

- Coded connectors
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

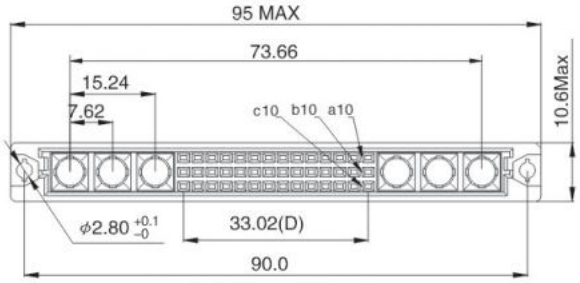
Dimensions



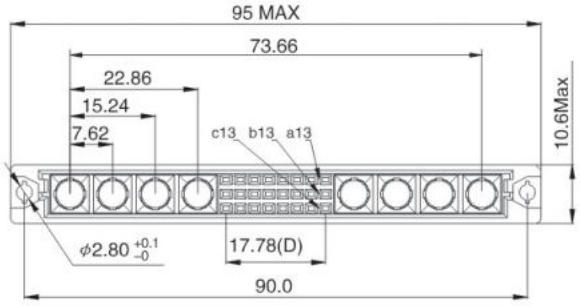
78 SIGNAL CONTACT



60 SIGNAL CONTACT

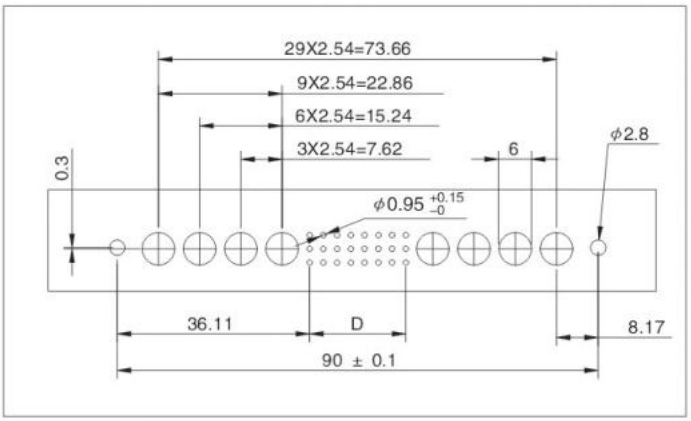


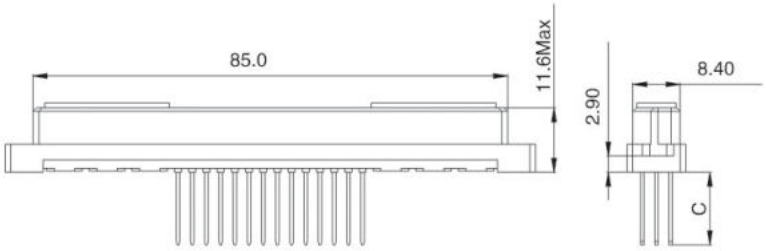
42 SIGNAL CONTACT



24 SIGNAL CONTACT

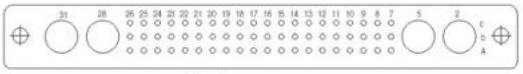
Recommended P.C.B. layout



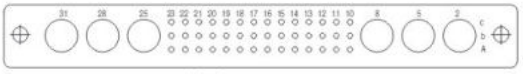


Contact arrangement
View from termination side

78+2



60+4



42+6

24+8

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type M Solder Connectors

CODE NO.	14	30	40
C =	5	13	17
T =		0.6x0.6	0.6x0.6

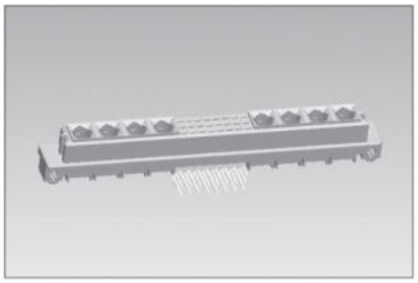
Ordering Information

NO. OF CONTACTS		78+2	60+4	42+6	24+8
POSITION		a+b+c	a+b+c	a+b+c	a+b+c
TERMINATION	QUALITY	PART NUMBER			
5.0 mm	III	126-1-786-14-10	126-1-606-14-10	126-1-426-14-10	126-1-246-14-10
	II	126-1-786-14-20	126-1-606-14-20	126-1-426-14-20	126-1-246-14-20
13.0 mm	III	126-1-786-30-10	126-1-606-30-10	126-1-426-30-10	126-1-246-30-10
	II	126-1-786-30-20	126-1-606-30-20	126-1-426-30-20	126-1-246-30-20
17.0 mm	III	126-1-786-40-10	126-1-606-40-10	126-1-426-40-10	126-1-246-40-10
	II	126-1-786-40-20	126-1-606-40-20	126-1-426-40-20	126-1-246-40-20

Remarks:

14- Straight tail length 5.0
30-Wrap posts tail length 13.0mm
40-Wrap posts tail length 17.0mm
T---Cross section of wrap post(Thickness x Width)

Right Angle Female Type M Connectors

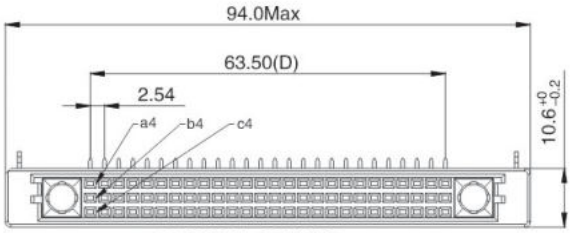


NEW

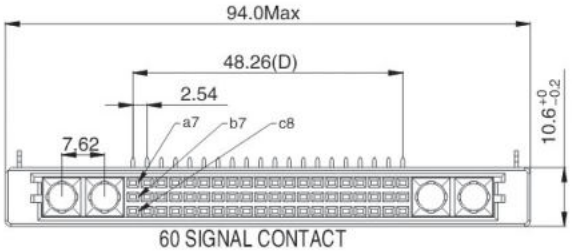
Option:

- Coded connectors
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

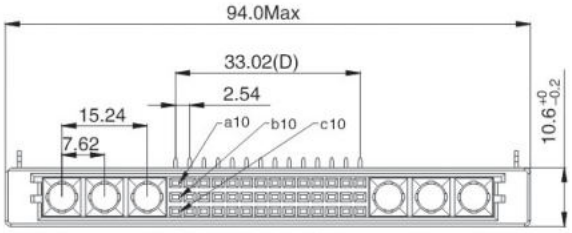
Dimensions



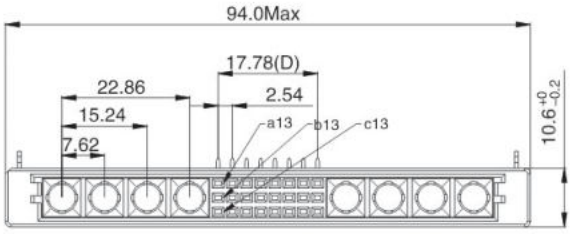
78 SIGNAL CONTACT



60 SIGNAL CONTACT

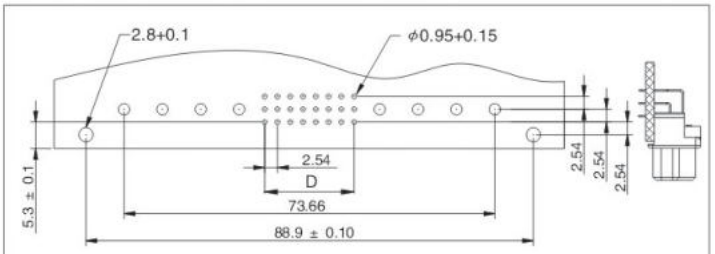


42 SIGNAL CONTACT

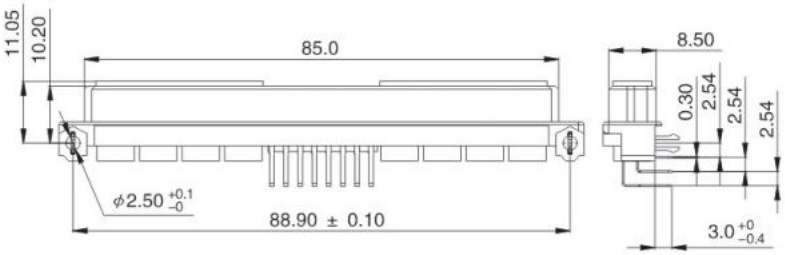


24 SIGNAL CONTACT

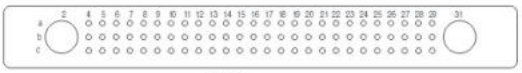
Recommended P.C.B. layout



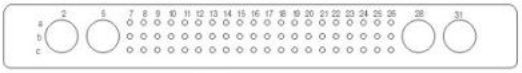
Recommended P.C.B. layout



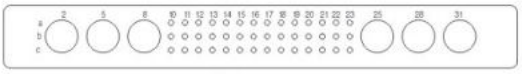
Contact arrangement
View from termination side



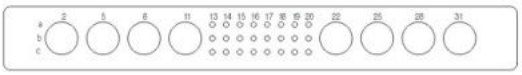
78+2



60+4



42+6



24+8

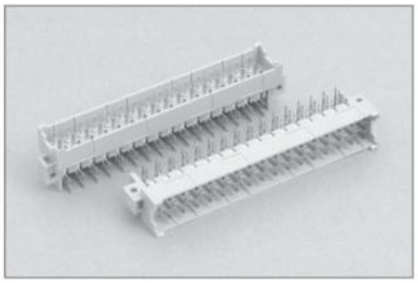
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Right Angle Female Type M Connectors

Ordering Information

NO. OF CONTACTS		78+2	60+4	42+6	24+8
POSITION		a+b+c	a+b+c	a+b+c	a+b+c
TERMINATION	QUALITY	PART NUMBER			
3.0 mm	III	131-1-786-20-10	131-1-606-20-10	131-1-426-20-10	131-1-246-20-10
	II	131-1-786-20-20	131-1-606-20-20	131-1-426-20-20	131-1-246-20-20
7.0 mm	III	131-1-786-17-10	131-1-606-17-10	131-1-426-17-10	131-1-246-17-10
	II	131-1-786-17-20	131-1-606-17-20	131-1-426-17-20	131-1-246-17-20

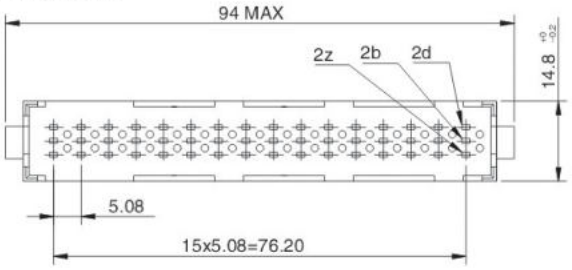
Right Angle Male Type F48 Connectors



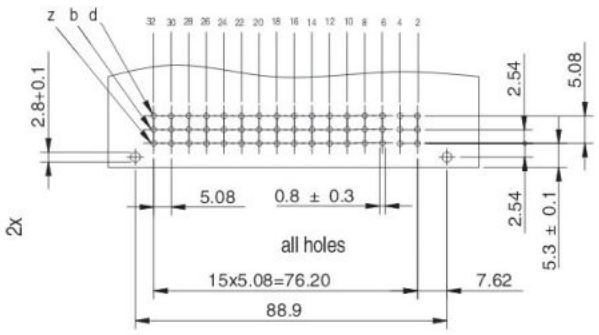
Option:

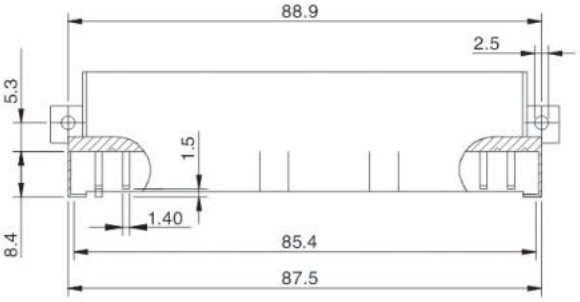
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

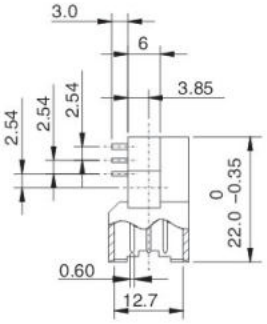
Dimensions

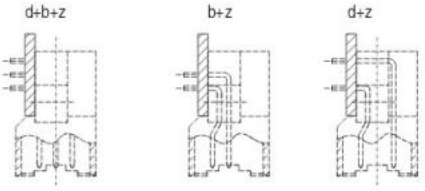


Recommended P.C.B. layout









Ordering Information

NO. OF CONTACTS		48	32	32	47+1	31+1	46+2
POSITION		d+b+z	b+z	d+z	d+b+z z32 pre-mating	b+z z32 pre-mating	d+b+z b2+b32 pre-mating
TERMINATION	QUALITY	PART NUMBER					
3.0 mm	III	126-4-487-20-10	126-4-328-20-10	126-4-329-20-10	126-4-477-20-10-z32	126-4-318-20-10-z32	126-4-467-20-10-b2/32
	II	126-4-487-20-20	126-4-328-20-20	126-4-329-20-20	126-4-477-20-20-z32	126-4-318-20-20-z32	126-4-467-20-20-b2/32

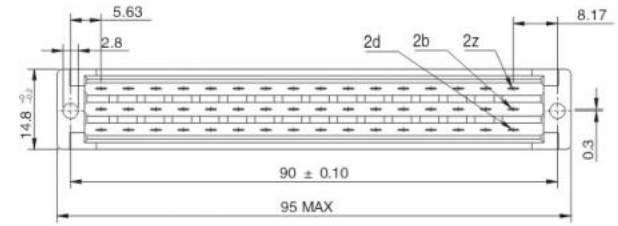
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type F48 Connectors

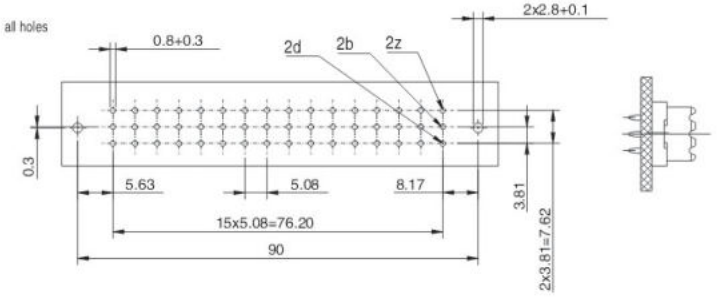
Option:

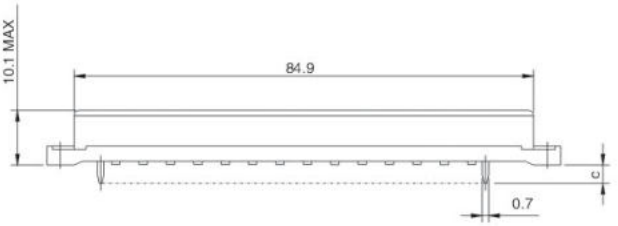
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

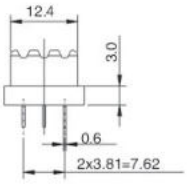
Dimensions

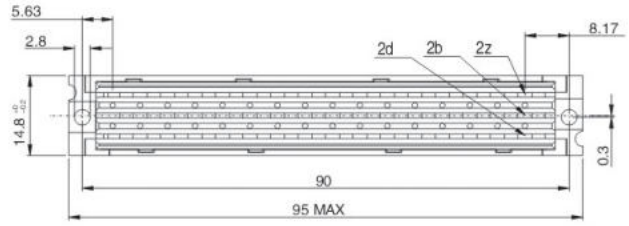


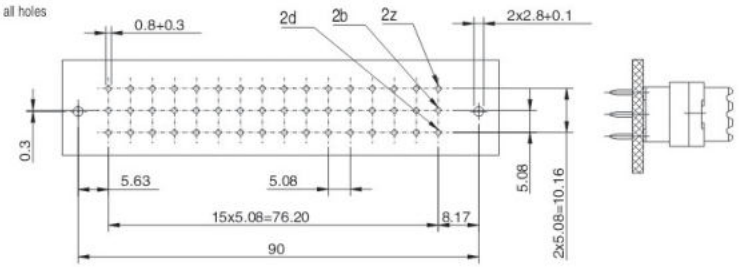
Recommended P.C.B. layout

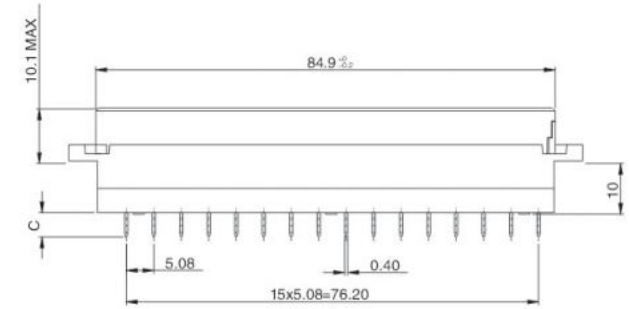


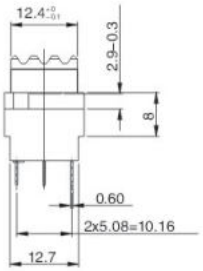








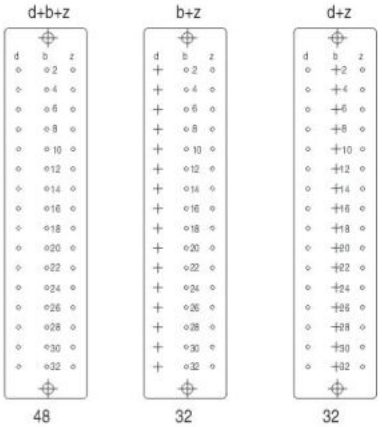




Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female Type F48 Connectors

Contact arrangement
view from termintion side



CODE NO.	11L	13L	11	13
C =	3.2	4.5	3.2	4.5
T =	0.6x0.6	0.6x0.6	0.6x0.6	0.6x0.6
T =	Profile:10.1mm		Profile:20.1mm	

Ordering Information

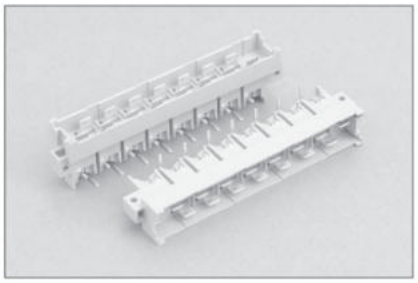
NO. OF CONTACTS			48	32	32
POSITION			d+b+z	b+z	d+z
TERMINATION	Quality	Profile	PART NUMBER		
3.2 mm	III	10.1 mm	126-3-487-11L-10	126-3-328-11L-10	126-3-329-11L-10
		20.1 mm	126-3-487-11-10	126-3-328-11-10	126-3-329-11-10
	II	10.1 mm	126-3-487-11L-20	126-3-328-11L-20	126-3-329-11L-20
		20.1 mm	126-3-487-11-20	126-3-328-11-20	126-3-329-11-20
4.5 mm	III	10.1 mm	126-3-487-13L-10	126-3-328-13L-10	126-3-329-13L-10
		20.1 mm	126-3-487-13-10	126-3-328-13-10	126-3-329-13-10
	II	10.1 mm	126-3-487-13L-20	126-3-328-13L-20	126-3-329-13L-20
		20.1 mm	126-3-487-13-20	126-3-328-13-20	126-3-329-13-20

Remarks:

11L---Straight solder tail lenght 3.2mm W/Low profile insulator
11---Straight solder tail lenght 3.2mm W/High profile insulator
13L---Straight solder tail lenght 4.5mm W/Low profile insulator
13---Straight solder tail lenght 3.2mm W/High profile insulator
T---Termination Cross Section (Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

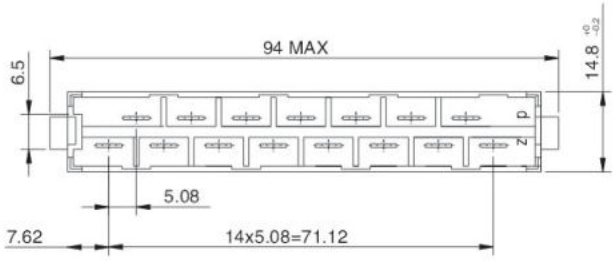
Right Angle Male Type H15 Connectors



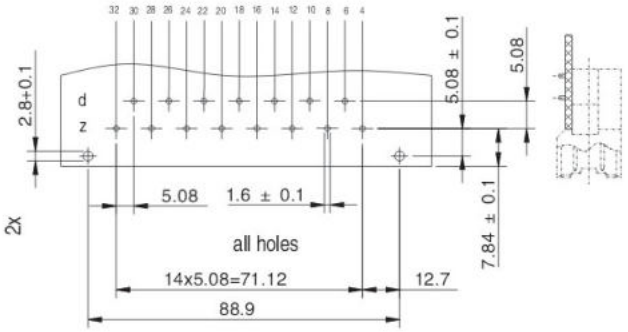
Option:

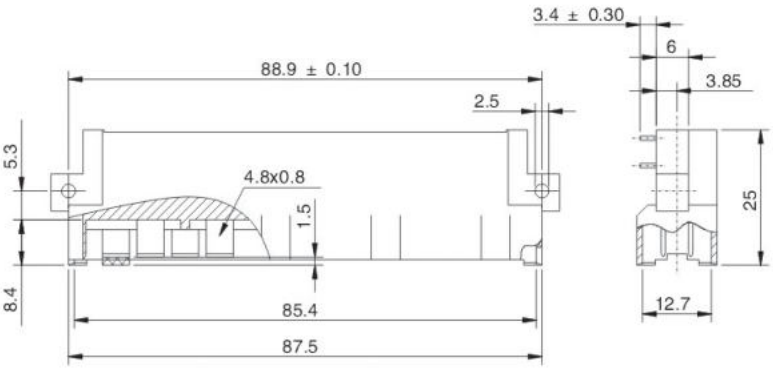
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions

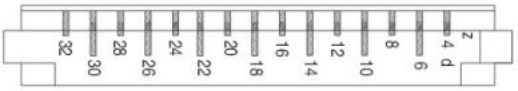


Recommended P.C.B. layout





Contact arrangement
View from termination side

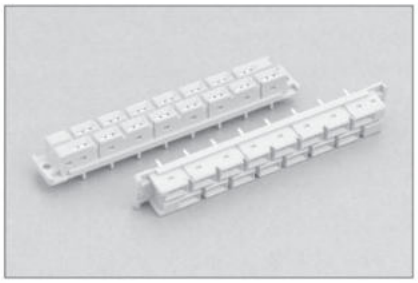


Ordering Information

NO. OF CONTACTS	15	14+1	13+2
POSITION	d+z	d+z Z32 pre-mating	d+z Z4+Z32 pre-mating
TERMINATION	PART NUMBER		
3.0 mm	125-4-159-20-30	125-4-149-20-30-Z32	125-4-139-20-30-Z4/32

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

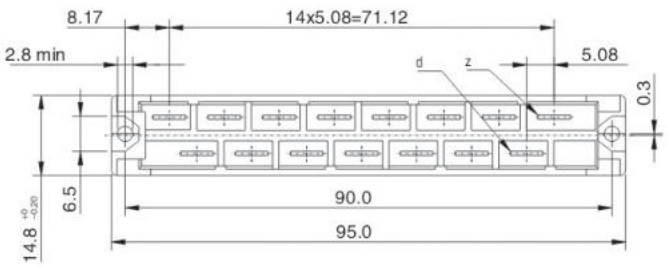
Vertical Female Type H15 Connectors



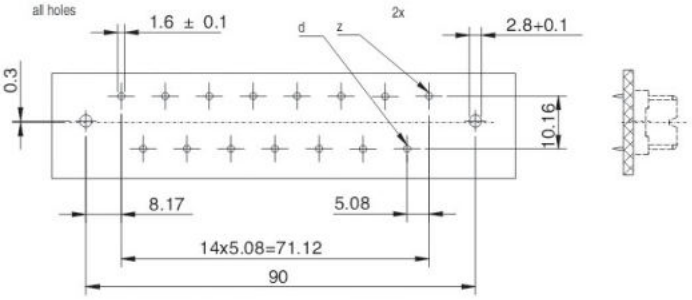
Option:

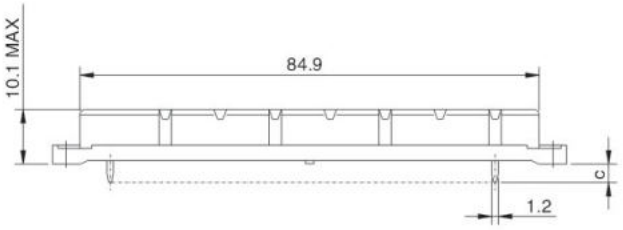
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

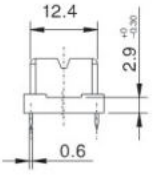
Dimensions



Recommended P.C.B. layout







Contact arrangement
view from termintion side

Ordering Information

NO. OF CONTACTS	15
POSITION	d+z
TERMINATION	PART NUMBER
4.0 mm	125-3-159-12-30
10.0 mm	125-3-159-16-30

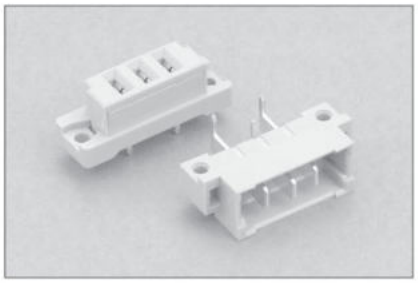
CODE NO.	12	16
C =	4.0	10
T =	0.6x1.2	0.6x1.2

Remarks:

12---Straight solder tail length 4.0mm
16---Straight solder tail length 10.0mm
T---Termination Cross Rection (Thickness x Width)

Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Vertical Female & Male R.A Type H3 Connectors

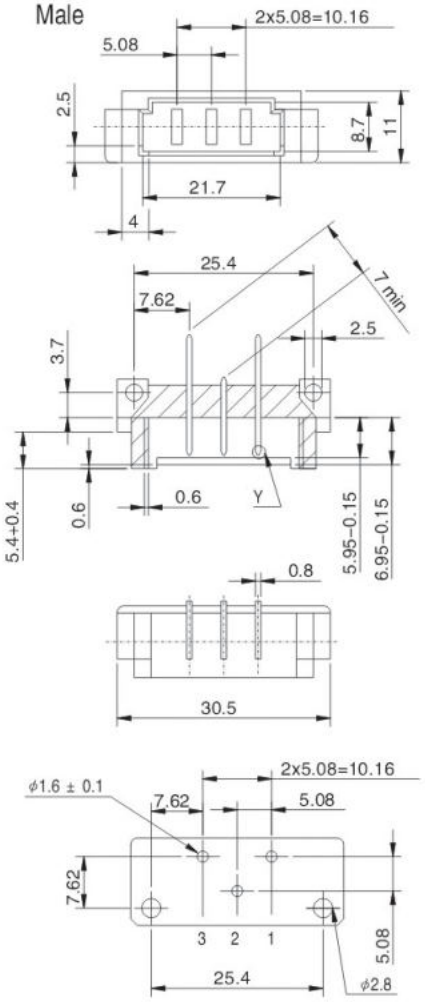


Option:

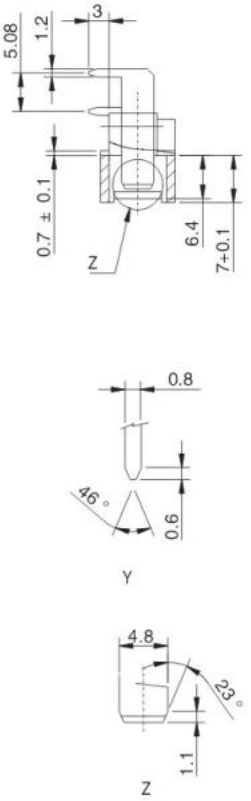
- Extended male contact
- Variations
- Please refer to page 48 for complete part number coding
- Other variations, please consult factory

Dimensions

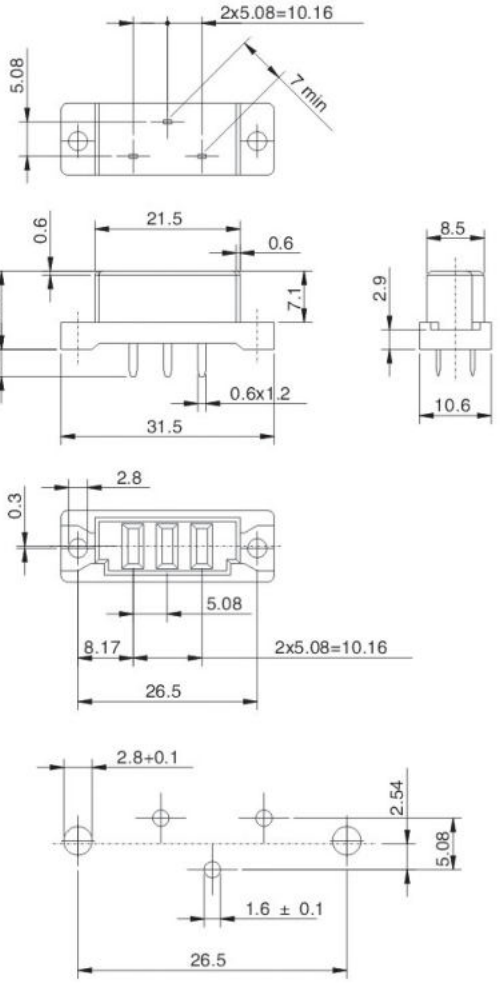
Male



P.C.B. layout



Female



P.C.B. layout

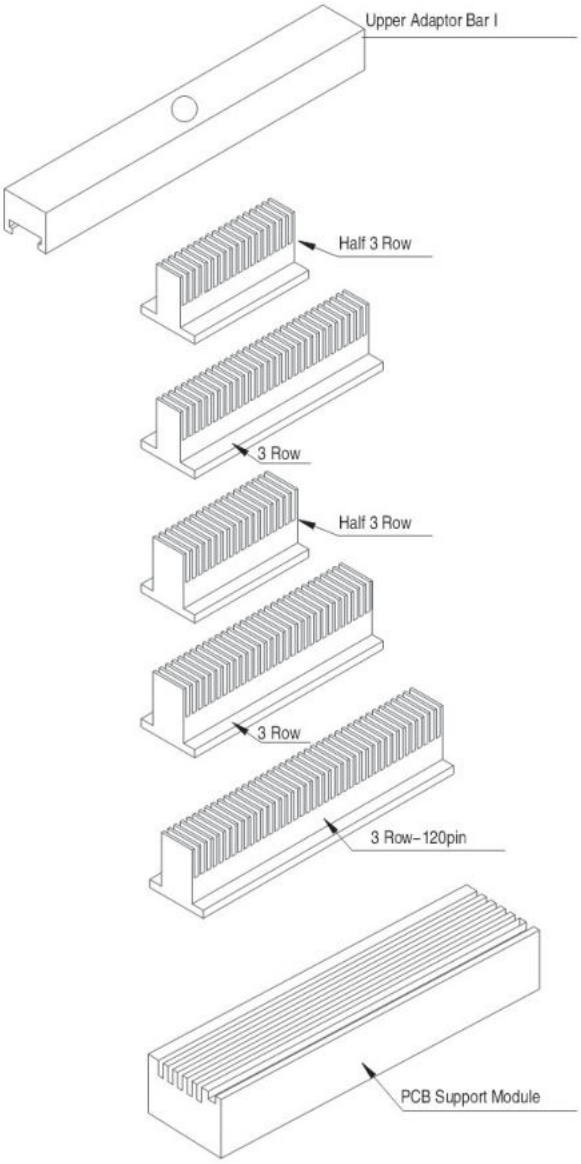
Ordering Information

NO. OF CONTACTS	3
TERMINATION	PART NUMBER
Female 4.0 mm	125-3-31-12-30
Male 3.0 mm	125-4-31-20-30

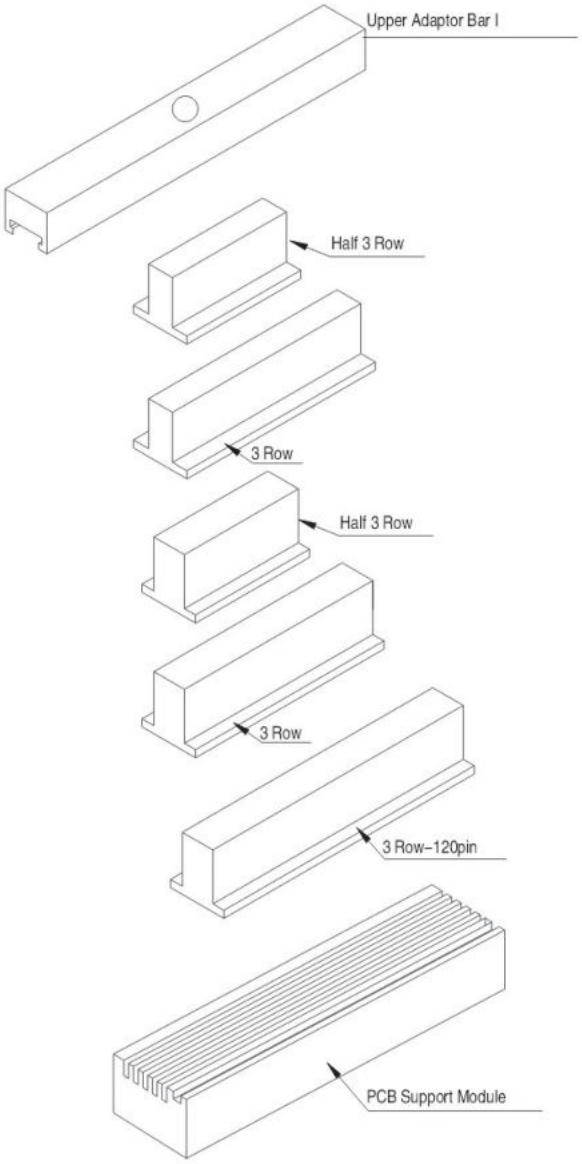
Dimensions shown are for reference purpose only, All dimensions are in millimeters unless othrwise specified.

Application Toolings

Male Connector Insertion



Female Connector Insertion



Ordering Information

Description	Tool Part Number
Upper Adaptor Bar I	MEUAB I
Upper insert – half 2 Row	MEUiH2
Upper insert – half 3 Row	MEUiH3
Upper insert – 2Row	MEUi2
Upper insert – 3Row	MEUi3
Upper insert – 2Row/120pins	MEUi120
PCB Support module	MEPSM

Ordering Information

Description	Tool Part Number
Upper Adaptor Bar I	FFUAB I
Upper insert – half 2 Row	FFUiH2
Upper insert – half 3 Row	FFUiH3
Upper insert – 2Row	FFUi2
Upper insert – 3Row	FFUi3
Upper insert – 2Row/120pins	FFUi120
PCB Support module	FFPSM

D Subminiature Connector

Technical data :

Material and finish :

Shell:	steel tin coat over nickel
Insulator:	Thermoplastic polyester self-extinguishing rated 94V-0
Contact:	Cooper alloy
Contact surface:	gold plated over nickel
Operating Temperature:	-55 ℃ to +105 ℃

Electrical data :

Current rating :	5 Amp
Contact resistance:	30mohm Max. at DC 100Max
Insulator resistance:	1000Mohm Min. at DC 500V
Voltage:	AC 1000V for 1minute

High Density D Subminiature Connector

Technical data :

Material and finish :

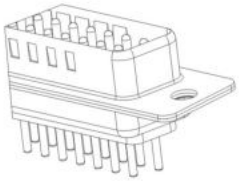
Shell:	steel tin coat over nickel
Insulator:	Thermoplastic polyester self-extinguishing rated 94V-0
Contact:	Cooper alloy
Contact surface:	gold plated over nickel
Operating Temperature:	-55 ℃ to +105 ℃

Electrical data :

Current rating :	1 Amp
Contact resistance:	30mohm Max. at DC 100Max
Insulator resistance:	1000Mohm Min. at DC 500V
Voltage:	AC 1000V for 1minute

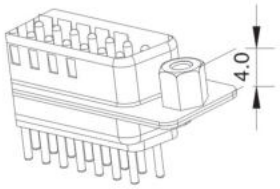
D-SUB Mounting Option 1

Code:B00



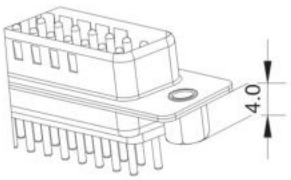
ϕ3.05 DIAMETER HOLES

Code:B01



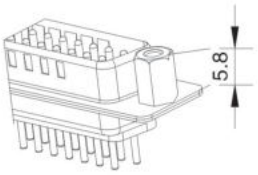
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B02



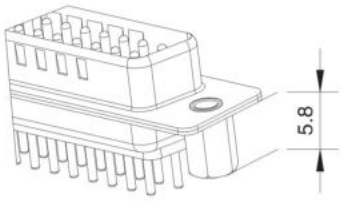
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B03



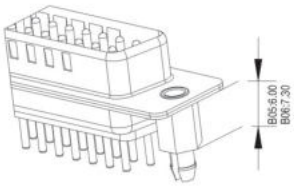
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B04



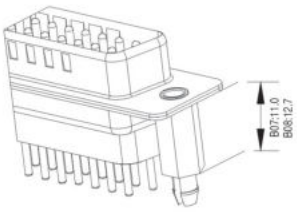
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B06
Code:B05



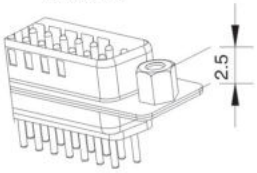
WITH 4-40 THREADED RIVETED BRACKETS

Code:B08
Code:B07



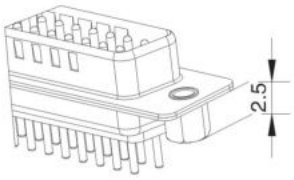
WITH 4-40 THREADED RIVETED BRACKETS

Code:B10



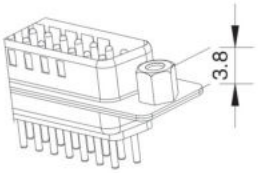
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B11



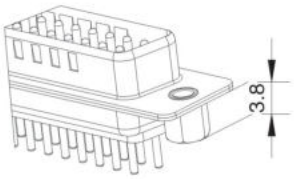
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B12



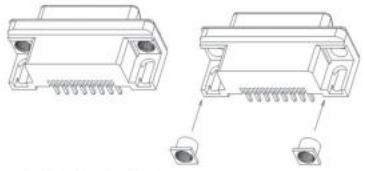
WITH #4-40 THREADED RIVETED JACK SCREWS

Code:B13

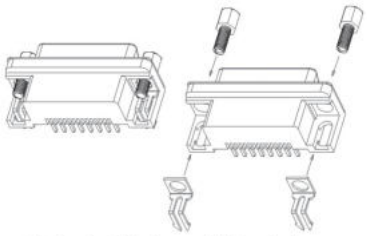


WITH #4-40 THREADED RIVETED JACK SCREWS

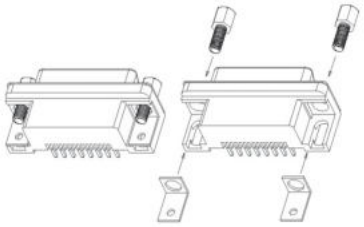
D-SUB Mounting Option 2



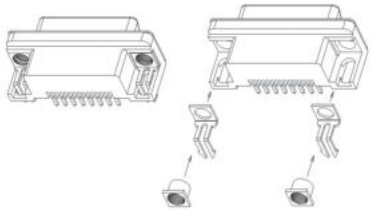
30: Non thread rivet
31: 4#40 thread rivet only



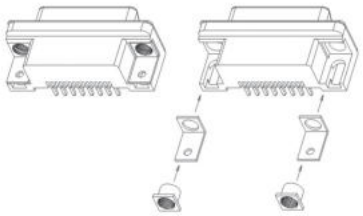
20: Non rivet,Fixed screws W/Boardlock



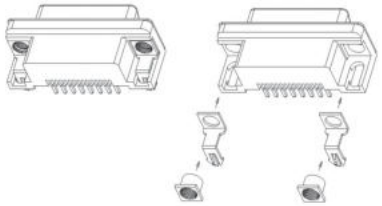
50: Non rivet,Fixed screws W/L Bracket



10: 4#40 Thread rivet W/Boardlock
70: M3 Thread rivet W/Boardlock



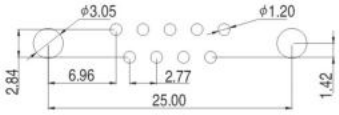
40: 4#40 Thread rivet W/L bracket
80: M3 Thread rivet W/L bracket



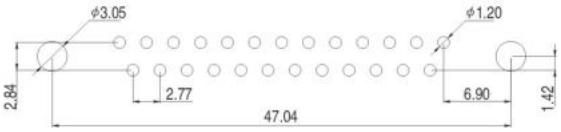
60: 4#40 Thread rivet W/4-prong Boardlock
90: M3 Thread rivet W/4-prong Boardlock

D Sub straight & right angle DIP soder PCB hole pattern

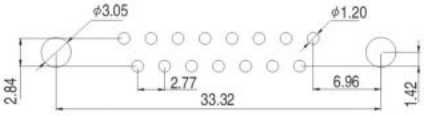
9 Positions



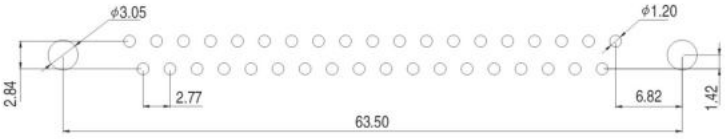
25 Positions



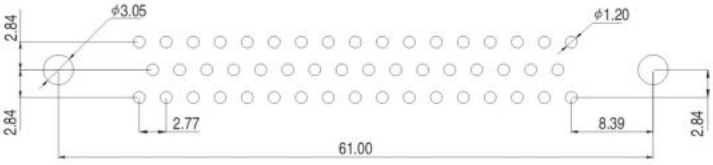
15 Positions



37 Positions

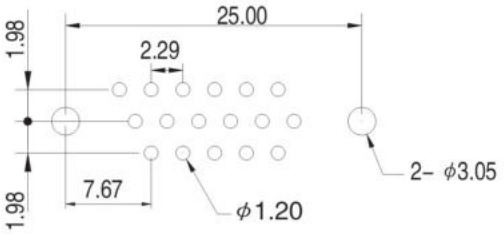


50 Positions

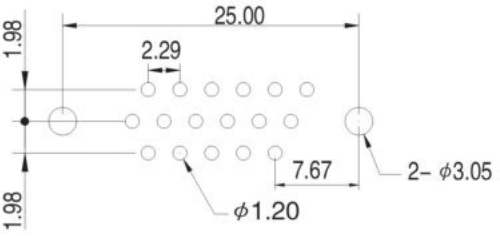


High Density D Sub straight DIP soder PCB hole pattern

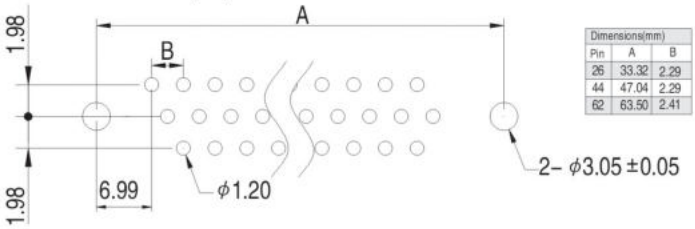
15 POSITION FEMALE



15 POSITION MALE

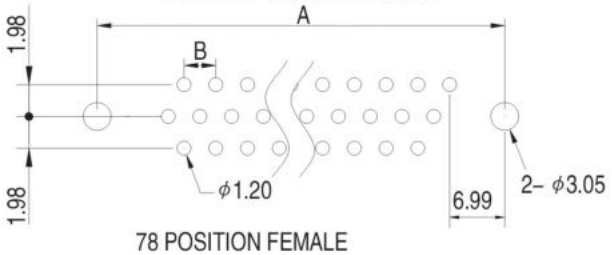


26,44,62 POSITION MALE

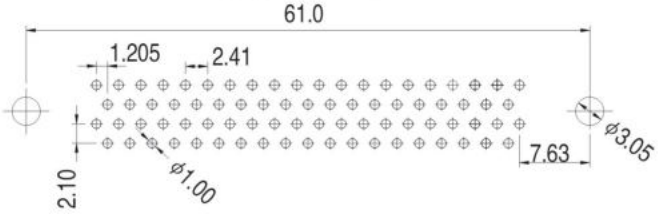


Dimensions(mm)		
Pin	A	B
26	33.32	2.29
44	47.04	2.29
62	63.50	2.41

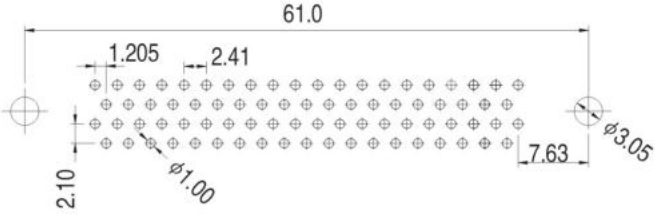
26,44,62 POSITION FEMALE



78 POSITION MALE

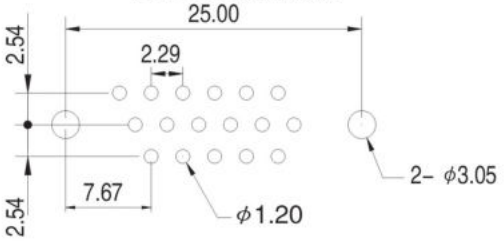


78 POSITION FEMALE

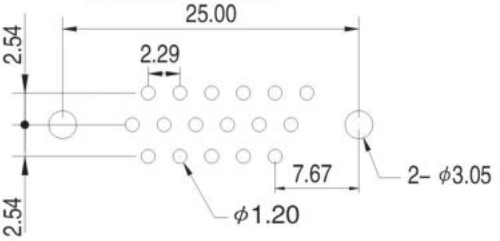


High Density D Sub right angle DIP solder PCB hole pattern

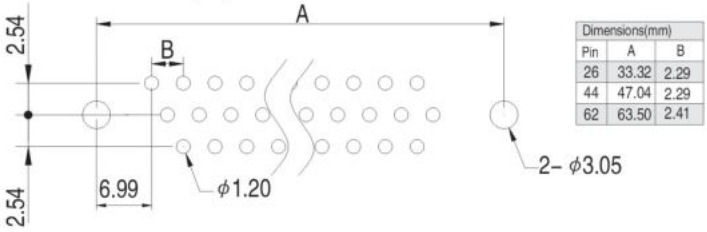
15 POSITION FEMALE



15 POSITION MALE

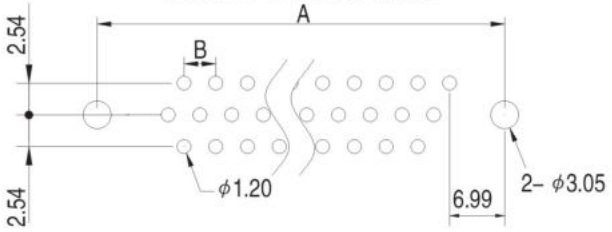


26,44,62 POSITION MALE

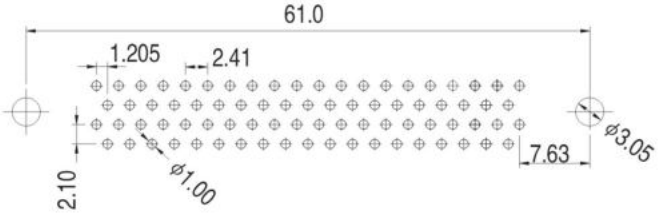


Dimensions(mm)		
Pin	A	B
26	33.32	2.29
44	47.04	2.29
62	63.50	2.41

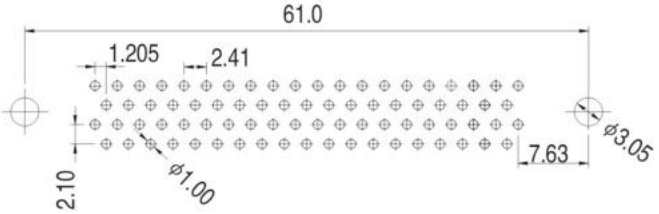
26,44,62 POSITION FEMALE



78 POSITION MALE



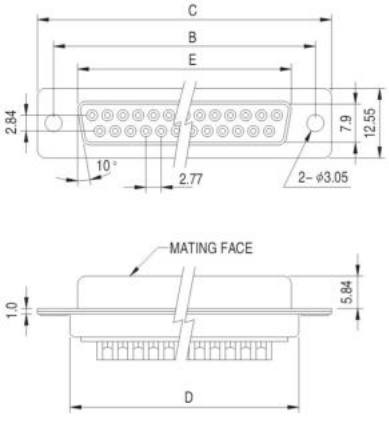
78 POSITION FEMALE

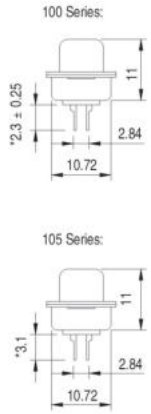


With Solder Cup Type

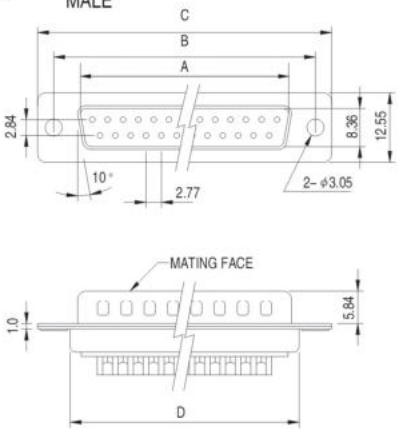
100 Series:(machine contact)
105 Series:(stamped contqact)

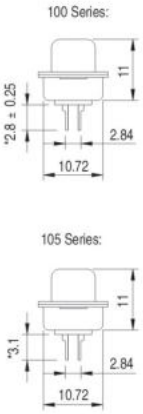
FEMALE





MALE

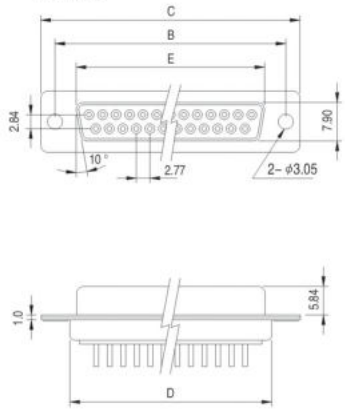


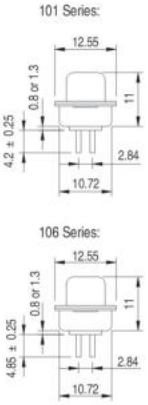


Dip Solder 180° Type

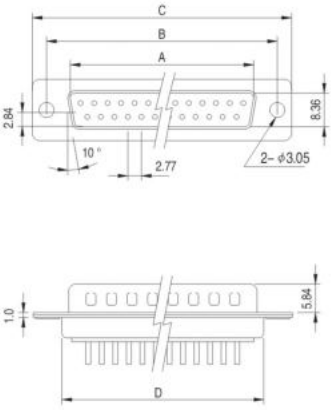
101 Series:(machine contact)
106 Series:(stamped contqact)

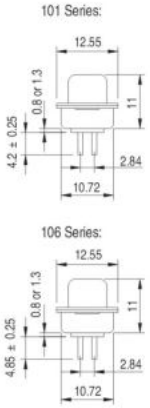
FEMALE





MALE





How to order

1	0	0
1	0	5

Serie-Nr.

— □□ — □ — □□ — □□□ — □ — □□ — □□ — □

Nr.of contact | Terminal type | Shell | Mounting method | Bolt option | Plating option | Insulator color | Class

How to order

1	0	1
1	0	6

Serie-Nr.

— □□ — □ — □□ — □□□ — □ — □□ — □□ — □

Nr.of contact | Terminal type | Shell | Mounting method | Bolt option | Plating option | Insulator color | Class

Nr.of contact	Dimensions(mm)				
	A	B	C	D	E
09	16.92	24.99	30.81	19.28	16.33
15	25.25	33.32	39.14	27.51	24.66
25	38.96	47.04	53.04	41.30	38.38
37	55.42	63.50	69.32	57.71	54.84
50	52.86	61.11	66.90	55.30	52.34

Terminal type	Code
Plug	1
Socket	2

Shell	Code
Tin plated	50
Yellow chromate	60

Insulator color	Code
White	1
Black	2
Gray	3
Blue	4

Mounting method	Code
Please refer page 110 for complete code	xxx

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

If you like to rivet M3thread instead of unc 4-40 please add "M" after last code for example B01M.B02M ...etc

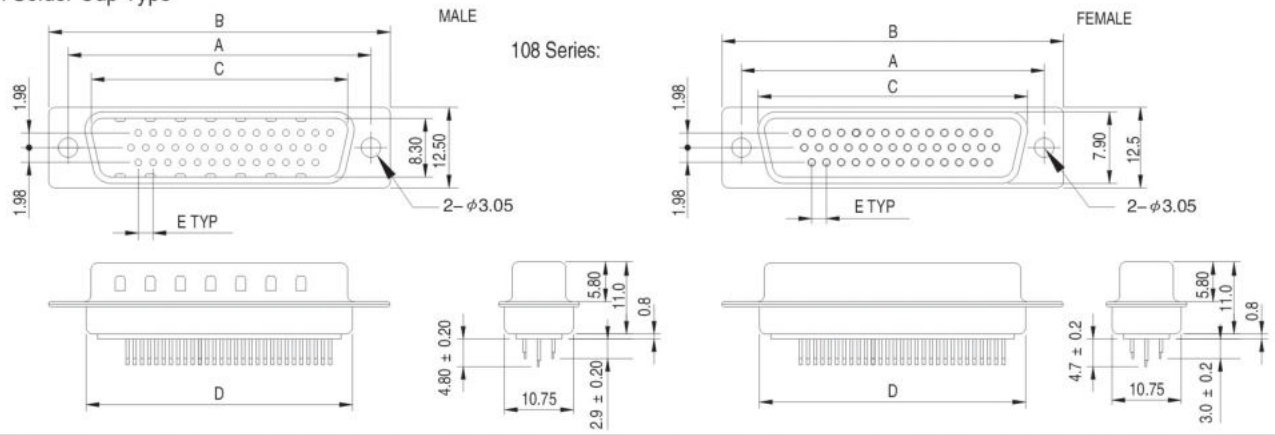
Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30
Selective gold plated for stamping contact only	

100	Solder cup with screw machine contact /Quality class 1,2 or 3
105	Solder cup with stamped contact /Only quality class 3

101	Dip solder With screw maching contact /Quality class 1.2 or 3
106	Dip solder With stamped contact /only for Quality class 3

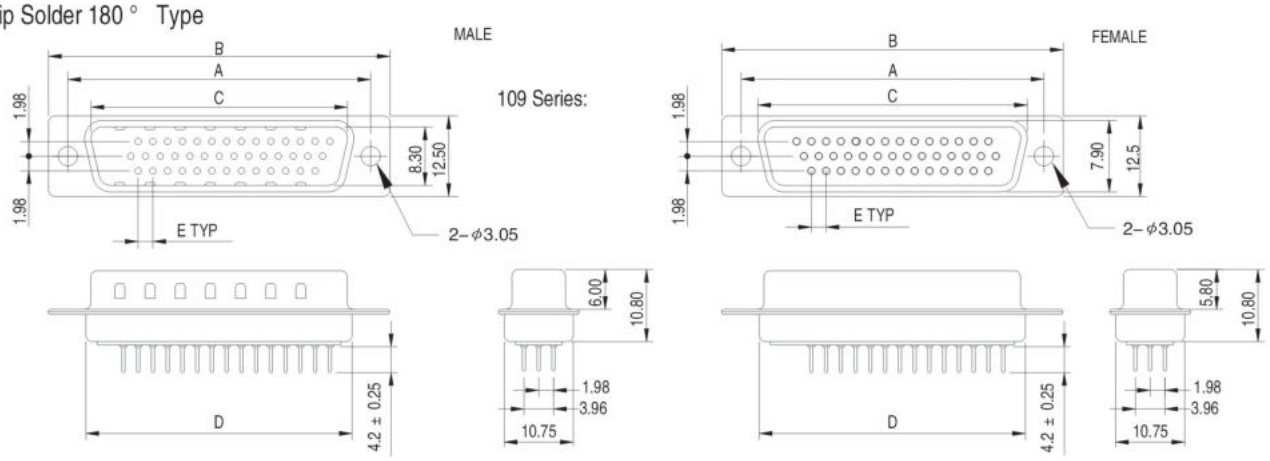
With Solder Cup Type

108 Series:



Dip Solder 180 ° Type

109 Series:

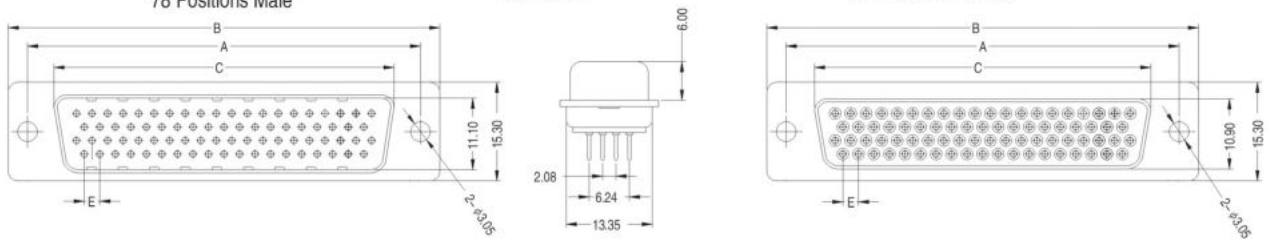


Dip Solder 180 ° Type

78 Positions Male

109 Series:

78 Positions Female



How to order

1	0	8
1	0	9

Serie-Nr.

Nr.of contact — Plug /Socket — Shell — Mounting method — Bolt option — Plating — Insulator

Nr. of contact	Dimension (Plug connector)				
	A	B	C	D	E
15	25.00	30.80	16.92	19.30	2.29
26	33.32	39.20	25.25	27.50	2.29
44	47.04	53.10	38.96	41.10	2.29
62	63.50	69.40	55.42	57.71	2.41
78	61.0	67.0	52.81	55.10	2.41

Nr. of contact	Dimension (Socket connector)				
	A	B	C	D	E
15	25.00	30.80	16.30	19.30	2.29
26	33.32	39.20	24.60	27.50	2.29
44	47.04	53.10	38.30	41.10	2.29
62	63.50	69.40	54.80	57.71	2.41
78	61.0	67.0	52.20	55.10	2.41

Mounting method	Code
Standard through hole φ3.05mm	B00
Riveted with UNC 4-40 thread insert 4.0mm Top shell	B01
Riveted with UNC 4-40 thread insert 4.0mm Bottom shell	B02
Riveted with UNC 4-40 thread insert 5.8mm Top shell	B03
Riveted with UNC 4-40 thread insert 5.8mm Bottom shell	B04
Riveted with UNC 4-40 thread Board lock 6.0mm	B05
Riveted with UNC 4-40 thread Board lock 7.3mm	B06
Riveted with UNC 4-40 thread insert 2.5mm on Top shell	B10
Riveted with UNC 4-40 thread insert 2.5mm on Bottom shell	B11
Riveted with UNC 4-40 thread insert 3.8mm on Top shell	B12
Riveted with UNC 4-40 thread insert 3.8mm on Bottom shell	B13
Please refer page 110 for mounting option	

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

If you like to rivet M3thread instead of unc 4-40 please add "M" after last code

Insulator color	Code
White	1
Black	2
Gray	3
Blue	4

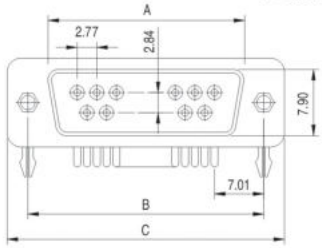
Terminal Type	Code
Plug	1
Socket	2

Shell	Code
Tin plated	50
Yellow chromate	60

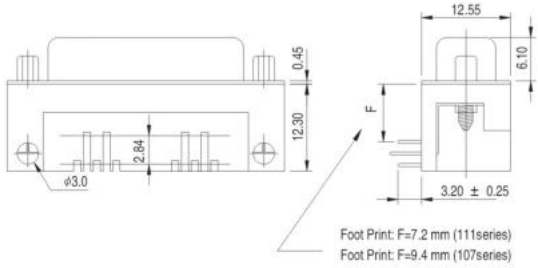
Dip Solder 90 ° Type

Female

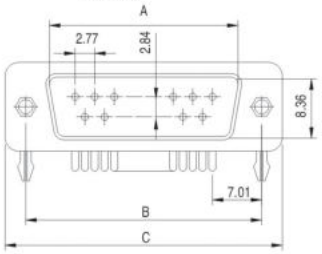
107 Series:
111 Series:



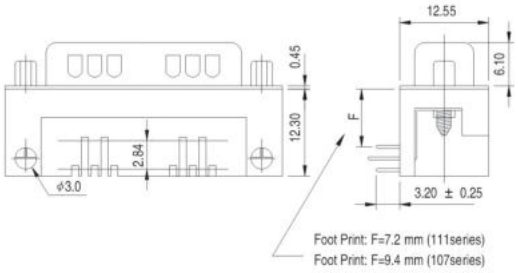
Dimensions(Female version)			
	A	B	C
9	16.33	24.99	30.81
15	24.66	33.32	39.14
25	38.38	47.04	53.04
37	54.84	63.50	69.32



Male



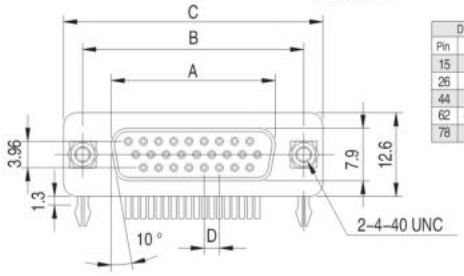
Dimensions(Male version)			
	A	B	C
9	16.92	24.99	30.81
15	25.25	33.32	39.14
25	38.96	47.04	53.04
37	55.42	63.50	69.32



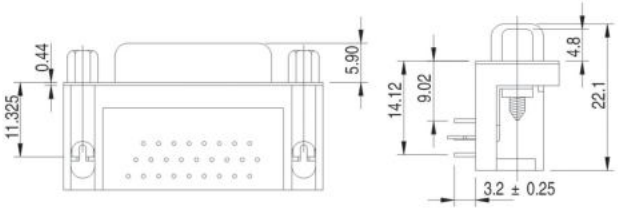
Dip Solder 90 ° Type

Female

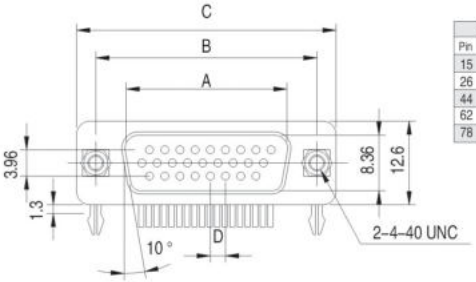
110 Series:



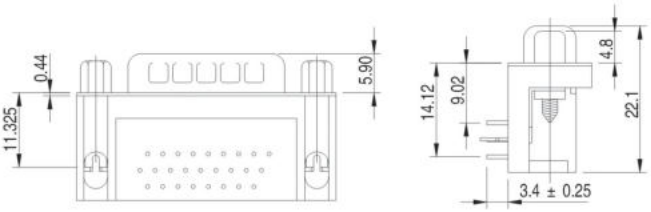
Dimensions(Female)				
Pin	A	B	C	D
15	16.33	24.99	30.81	2.29
26	24.66	33.32	39.14	2.29
44	38.38	47.04	53.04	2.29
62	54.84	63.50	69.32	2.41
78	52.20	61.00	67.00	2.41



Male



Dimensions(Male)				
Pin	A	B	C	D
15	16.92	24.99	30.81	2.29
26	25.25	33.32	39.14	2.29
44	38.96	47.04	53.04	2.29
62	55.42	63.50	69.32	2.41
78	52.81	61.00	67.00	2.41



How to order

1	0	7
1	1	0
1	1	1

Serie-Nr.

Nr.of contact — Terminal Type — Mounting — Hexagonal Bolt — Plating

110 Series:	
Nr.of contact	Code
15	15
26	26
44	44
62	62
78	78

111 Series:	
Nr.of contact	Code
9	09
15	15
25	25
37	37

Terminal Type	Code
Plug	1
Socket	2

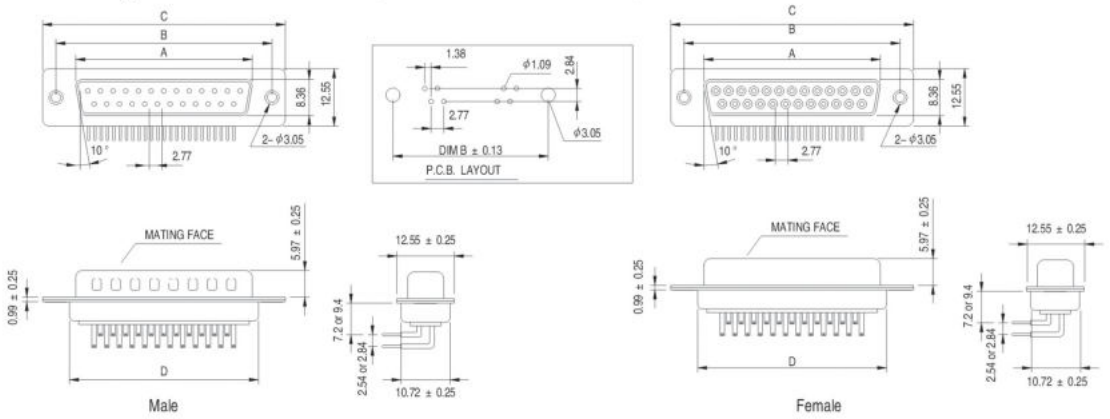
Mounting method	Code
4#40 Thread rivet W/Boardlock	10
Non rivet,Fixed screws W/Boardlock	20
Non thread rivet	30
4#40 Thread rivet only	31
4#40 Thread rivet W/L bracket	40
Non rivet,Fixed screws W/L Bracket	50
4#40 Thread rivet W/4-prong boardlock	60
M3 Thread rivet W/ bracket	70
M3 Thread rivet W/L Boardlock	80
M3 Thread rivet W/4-prong boardlock	90
Please refer page 111 for mounting method	

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

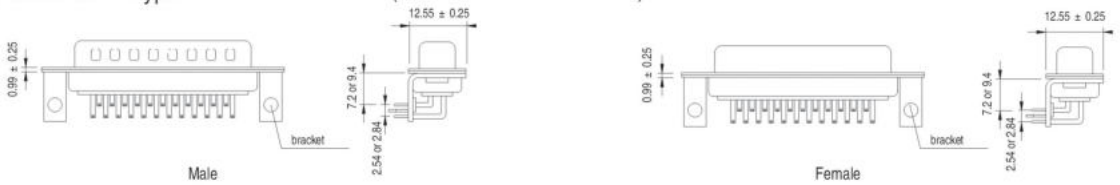
Dip Solder 90 ° Type

102 Series:(machine contact without bracket)



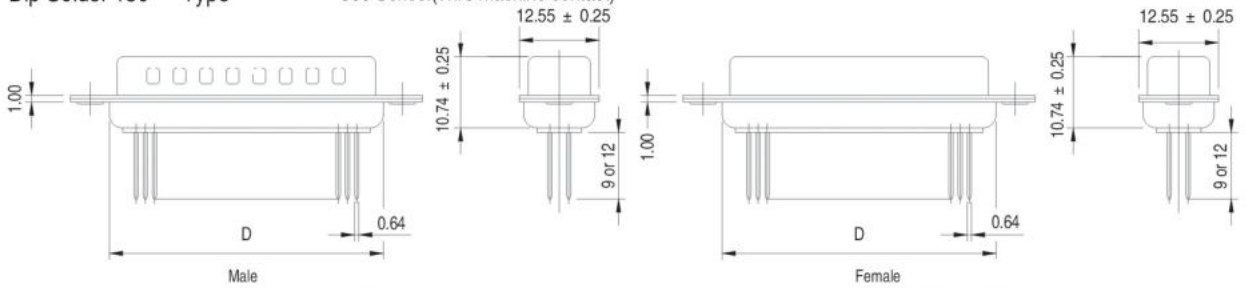
Dip Solder 90 ° Type

102 Series:(machine contact with bracket)



Dip Solder 180 ° Type

300 Series:(Wire machine contact)



How to order Serie

1	0	2	—			—		—			—			—		
Serie-Nr.				Nr.of	contact		Plug/socket		Shell		Foot Print			Bracket		Quality

102	Right Angle Machined Contact without Bracket /Quality class 1,2 or 3

Shell	Code
Tin plated	1
Yellow Chromate	2

Footprint	Code
7.2	1
9.4	2

Bracket option	Code
without bracket	0
with bracket	1

Quality class	Code
III	3
II	2
I	1

Nr. of contact	code
9	09
15	15
25	25
37	37

Dimensions (Male version)				
	A	B	C	D
9	16.92	24.99	30.81	19.28
15	25.25	33.32	39.14	27.51
25	38.96	47.04	53.04	41.30
37	55.42	63.50	69.32	57.71

Dimensions (Female version)				
	A	B	C	D
9	16.33	24.99	30.81	19.28
15	24.66	33.32	39.14	27.51
25	38.38	47.04	53.04	41.30
37	54.84	63.50	69.32	57.71

How to order

3	0	0	—			—		—			—			—				—			—	
Serie-Nr.				Nr.of contact			Plug /Socket			Shell			Wire Dip Option			Quality class		Mounting method			Bolt option		Insulator

Nr. of contact	code
9	09
15	15
25	25
37	37

Insulator color	Code
White	1
Black	2

Mounting method	Code
Please refer page 110 for complete code	xxx

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

Terminal Type	Code
Plug	1
Socket	2

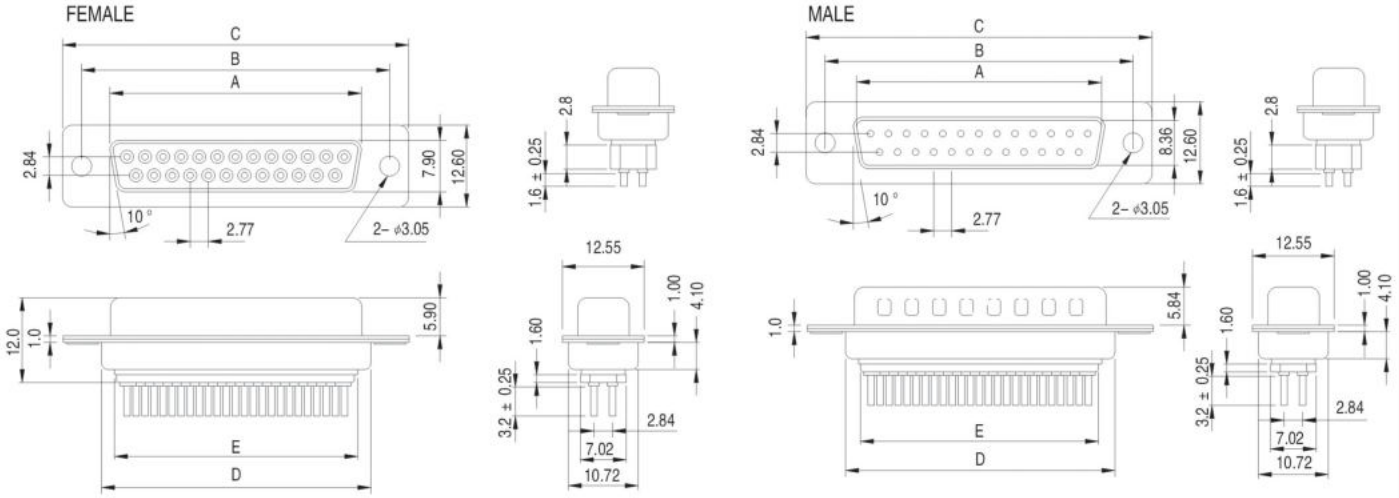
Shell	Code
Tin plated	50
Yellow chromate	60

Wire Dip Option	Code
Length 9.0mm	10
Length 12.0mm	20
As request	30

Quality class	Code
Class III	3
Class II	2
Class I	1

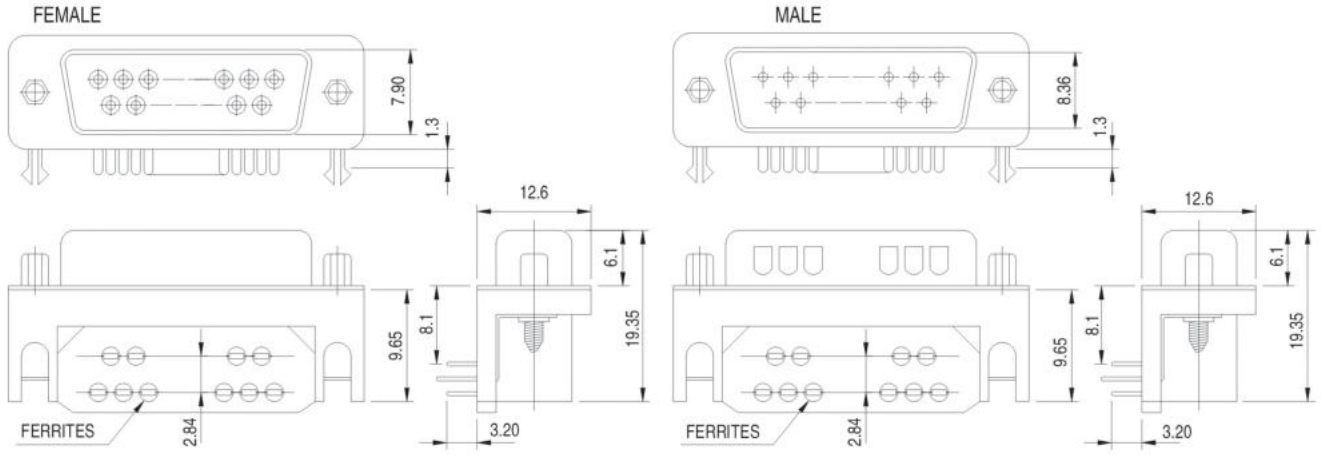
Dip Solder 180° Type

345 Series: Filter-Connector EMI-Type



Dip Solder 90° Type

346 Series: Filter-Connector EMI-Type



How to order

3 4 5 – □□ – □ – □□ – □□□ – □ – □□ – □ – □

Serie-Nr. | Nr.of contact | Plug/socket | Shell | Mounting method | Bolt Option | Plating option | Insulator | Dip length

Nr. of contact	code
9	09
15	15
19	19
23	23
25	25
37	37

Terminal type	Code
Plug	1
Socket	2

Shell	Code
Tin plated	50
Yellow chromate	60

Mounting method	Code
Please refer page 110 for complete code	xxx

Dimensions(mm)						
Position	Male A	Female A	B	C	D	E
9	16.92	16.33	24.99	30.81	19.20	15.45
15	25.25	24.66	33.32	39.14	27.70	24.45
25	38.96	38.38	47.04	53.04	41.10	38.00
37	55.42	54.84	63.50	69.32	57.30	53.96

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

Insulator color	Code
White	1
Black	2
Gray	3
Blue	4

Dip length	Code
1.6mm	16
3.2mm	32

How to order

3 4 6 – □□ – □ – □□ – □□ – □□

Serie-Nr. | Nr.of Contact | Terminal Contact | Mounting option | Hexagonal Bolt | Plating

Nr. of contact	code
9	09
15	15
25	25
37	37

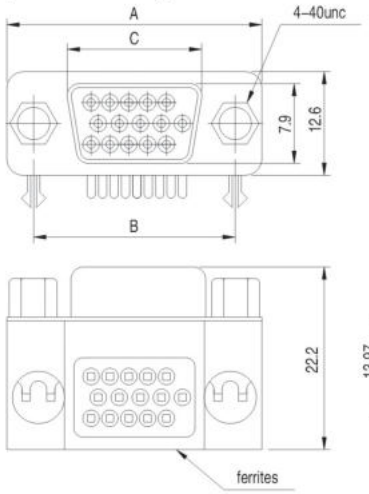
Terminal type	Code
Pin	1
Socket	2

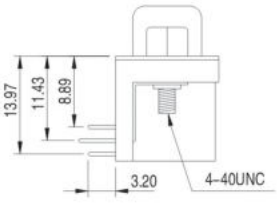
Mounting method	Code
Please refer page 111 for complete code	xxx

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

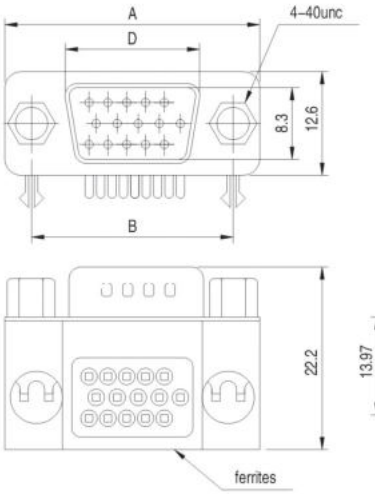
Dip Solder 90° Type

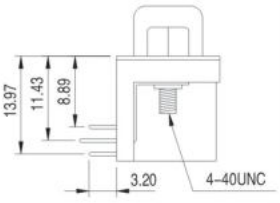




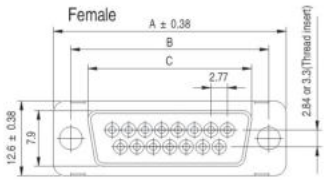
347 Series: Filter-Connector EMI-Type

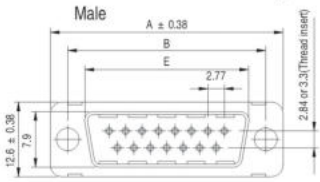
Dimensions(mm)					
Pin	A	B	C	D	E
15	30.81	24.99	16.33	16.92	2.29
26	39.14	33.32	24.66	25.25	2.29
44	53.04	47.04	38.38	38.96	2.29
62	69.32	63.50	54.84	55.42	2.41

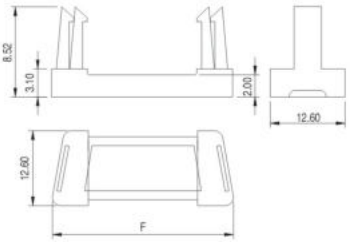


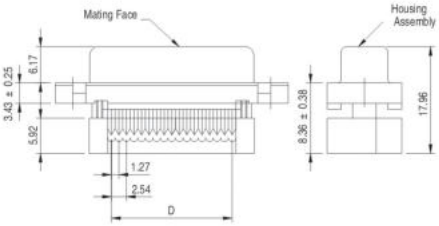


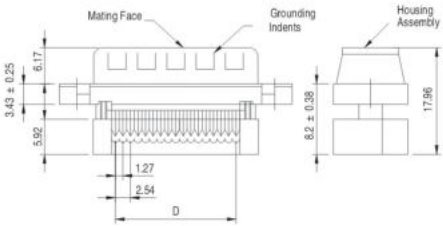
114Series: D-Sub Connector IDC Type











How to order

3	4	7	—			—		—			—			—		
Serie-Nr.				Nr.of Contact			Terminal Type		Mounting option			Hexagonal Bolt			Plating	

347 Series:	
Nr.of contact	Code
15	15
26	26
44	44
62	62

Terminal type	Code
Pin	1
Socket	2

Mounting method	Code
4#40 Thread rivet W/Boardlock	10
Non rivet,Fixed screws W/Boardlock	20
Non thread rivet	30
4#40 Thread rivet only	31
4#40 Thread rivet W/L bracket	40
Non rivet,Fixed screws W/L Bracket	50
4#40 Thread rivet W/4-prong boardlock	60
M3 Thread rivet W/ bracket	70
M3 Thread rivet W/L Boardlock	80
M3 Thread rivet W/4-prong boardlock	90
Please refer page 111 for complete code	

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

How to order Serie 114

1	1	4	—				—			—			—	6	0
Serie-Nr.				Nr.of Contact		Terminal Type		Termination option			Cable clamp			Plating	

Nr. of contact	Dimensions						code
	A	B	C	D	E	F	
9	30.89	24.99	16.92	10.16	16.33	23.03	09
15	39.14	33.32	25.25	17.78	24.66	30.65	15
25	53.09	47.04	38.96	30.48	38.38	43.35	25
37	69.39	63.50	55.45	45.72	54.84	58.59	37

Terminal type	Code
Pin	1
Socket	2

Termination option	Code
W/#4-40 Thread rivet	10
W/o #4-40 Thread rivet	20

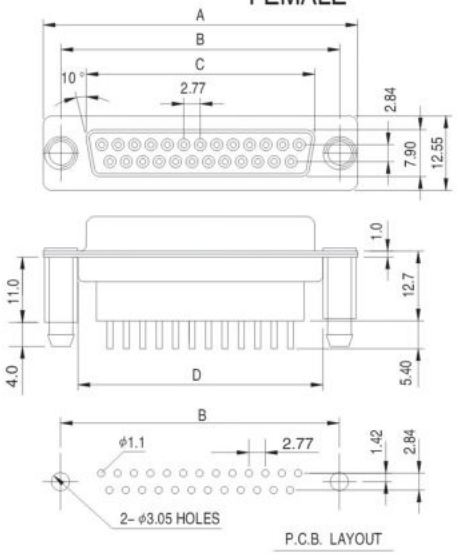
Cable clamp option	Code
Without cable clamp	00
With cable clamp	10

plating option	Code
Selective gold plated	60

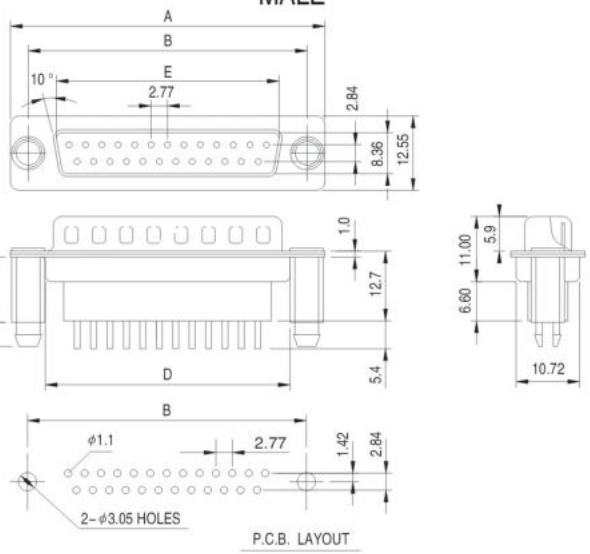
Dip Solder 180 ° Type

631 Series:

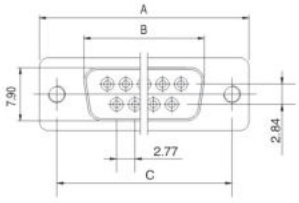
FEMALE

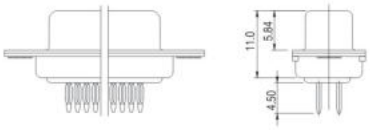


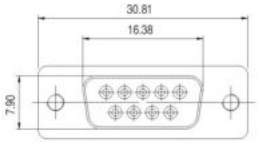
MALE



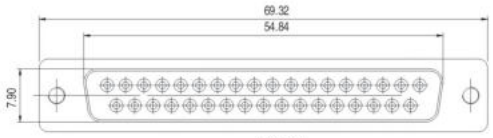
1686A Series: Press-fit Type



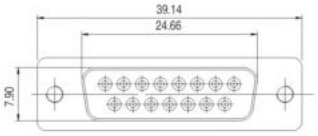




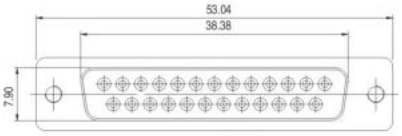
09 PIN



037 PIN

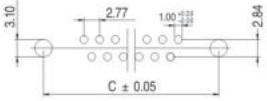


015 PIN



025 PIN

9-37PIN



Nr.of contact	Dimension A	B	C
9	30.81	16.38	24.99
15	39.14	24.66	33.32
25	53.04	38.38	47.04
37	69.32	54.84	63.50

How to order

6 3 1 — ☐☐ — ☐ — ☐☐ — ☐ — ☐☐☐

Serie-Nr. | Nr.of contact | Plug/socket | Shell | Plating | Mounting method

Nr. of contact	code
9	09
15	15
25	25
37	37

Terminal type	Code
Plug	1
Socket	2

Shell	Code
Tin plated	50
Yellow chromate	60

Mounting method	Code
Please refer page 110 for complete code	xxx

Dimensions(mm)					
Position	A	B	C	D	E
	± 0.38	± 0.13	± 0.13	± 0.13	± 0.13
9	30.81	24.99	16.33	19.28	16.92
15	39.14	33.32	24.66	27.51	25.25
25	53.04	47.04	38.38	41.30	38.96
37	69.32	63.50	54.84	57.71	55.42

Plating Option	Code
Full gold Flash plating	10
Selective gold flash plating	60
5u" selective gold plating	05
15u" selective gold plating	15
30u" selective gold plating	30

How to order Serie

1 6 8 6 A — ☐☐ — ☐☐☐ — ☐ — ☐ — ☐☐ — ☐☐ — ☐☐

Serie-Nr. | No.of contact | Plug/socket | Shell | plating | Mounting method | Quality

No.of contact	Code
9	09
15	15
25	25
37	37

Terminal type	Code
Plug	1
Socket	2

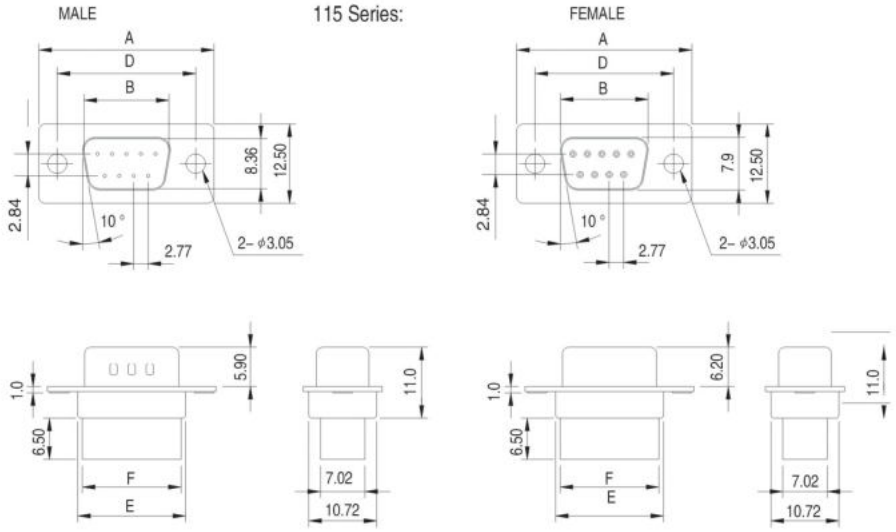
Terminal type	Code
Tin plated	50
Yellow chromate	60

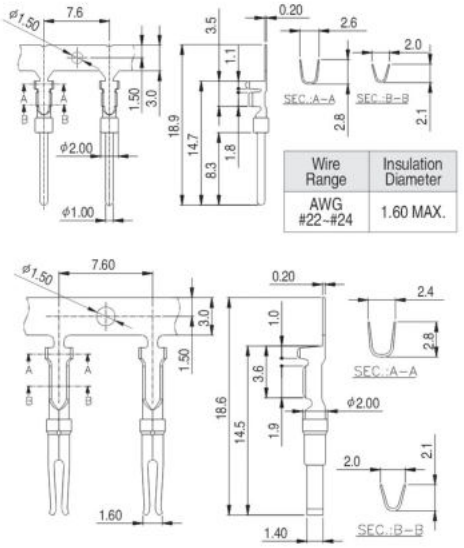
Plating option	Code
Selective gold Flash plated	60
15u"Selective gold plated	615
30u"Selective gold plated	630

Mounting method	Code
Please refer page 110 for complete code	xxx

Hex. Bolt Option	Code
Loose Hex. Option	10
Assembled Hex. Bolts	20
Omit for Without hex bolt	30

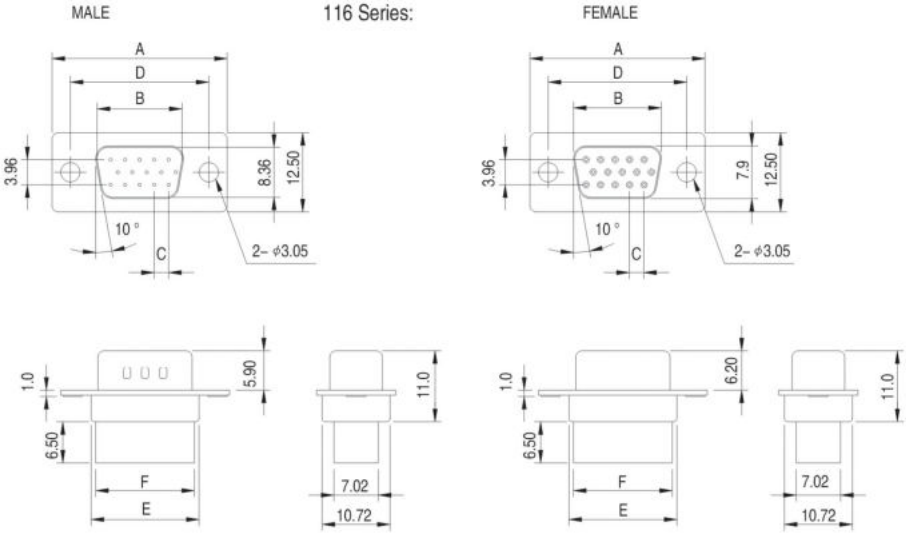
115 Series:

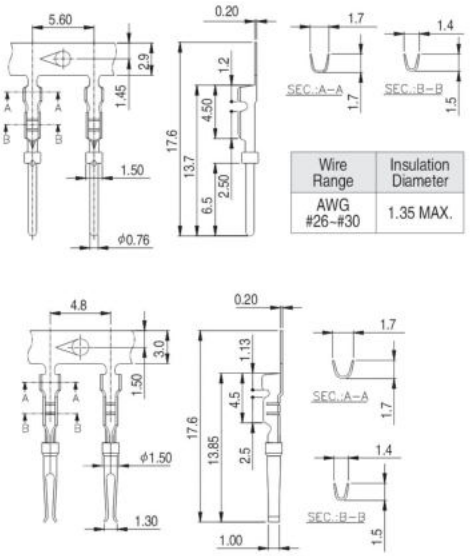




Wire Range	Insulation Diameter
AWG #22~#24	1.60 MAX.

116 Series:





Wire Range	Insulation Diameter
AWG #26~#30	1.35 MAX.

How to order

1	1	5
1	1	6

Serie-Nr. — Nr.of contact — Plug /Socket — Plating — Shell — Mounting method — Bolt option

115 series							
Nr. of contact	Dimension (FEMALE)						(MALE)
	A	B	C	D	E	F	B
09	30.80	16.38	2.77	24.99	19.28	15.60	16.92
15	39.10	24.66	2.77	33.32	27.50	23.90	25.50
25	53.00	36.38	2.77	47.04	41.03	38.00	38.96
37	69.30	54.84	2.77	63.50	57.30	54.10	55.42

116 series							
Nr. of contact	Dimension (FEMALE)						(MALE)
	A	B	C	D	E	F	B
15	30.80	16.38	2.29	24.99	19.28	15.60	16.92
26	39.10	24.66	2.29	33.32	27.50	23.90	25.50
44	53.00	36.38	2.29	47.04	41.03	38.00	38.96
62	69.30	54.84	2.41	63.50	57.30	54.10	55.42

Terminal Type	Code
Plug	1
Socket	2

Shell	Code
Tin plated	50
Yellow chromate	60

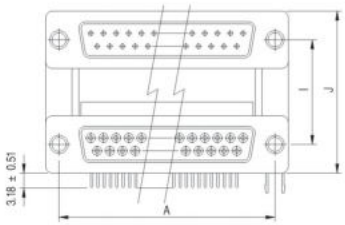
Plating Option	Code
Selective gold flash plated	60
15u" Selective gold plated	15
30u" Selective gold plated	30

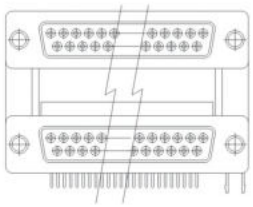
Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

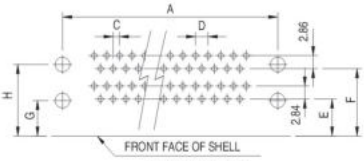
Mounting method	Code
Standard through hole ϕ3.05mm	B00
Riveted with UNC 4-40 thread insert 4.0mm Top shell	B01
Riveted with UNC 4-40 thread insert 4.0mm Bottom shell	B02
Riveted with UNC 4-40 thread insert 5.8mm Top shell	B03
Riveted with UNC 4-40 thread insert 5.8mm Bottom shell	B04
Riveted with UNC 4-40 thread Board lock 6.0mm	B05
Riveted with UNC 4-40 thread Board lock 11.0mm	B07
Please refer page 110 for mounting option	

IF you require contact only
Please Put xx in the bracket
(Nr.of contact) & omit
The code No.after plating option

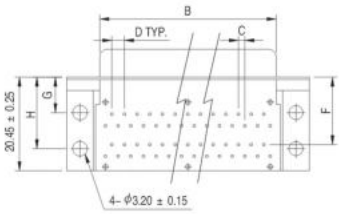
380 Series: 9-9pin & 15-15pin & 25-25pin & 37-37pin & 50-50pin

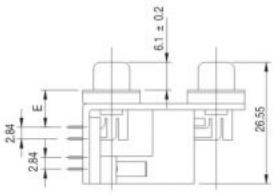






P.C.B. LAYOUT

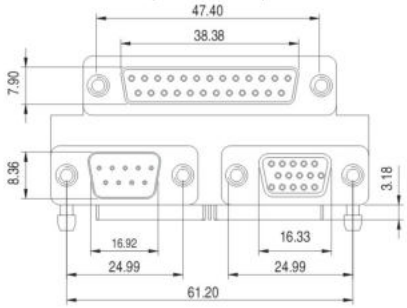


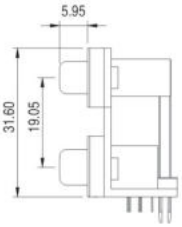


Nr.of Contact	Dimensions(mm)				Code
	A ± 0.13	B ± 0.38	C	D	
09~09	24.99	16.33	1.37	2.77	09
15~15	33.32	24.66	1.385	2.77	15
25~25	47.04	38.38	1.385	2.77	25
37~37	63.50	54.84	1.385	2.77	50

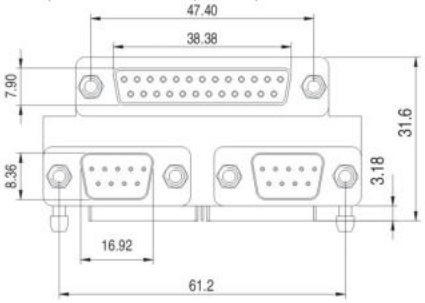
381 Series:

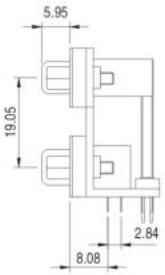
25 Poles female over 9 poles&H.D. 15 poles female

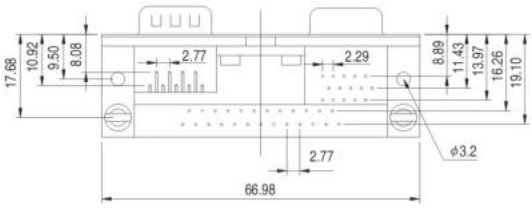


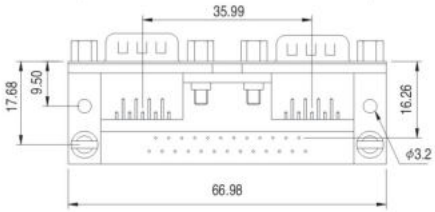


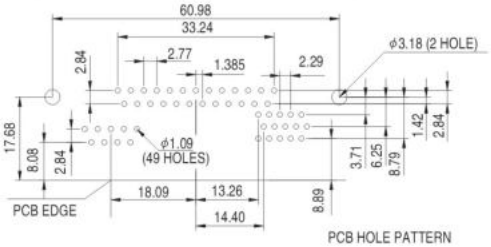
25 poles female over 2 pcs of 9 poles male



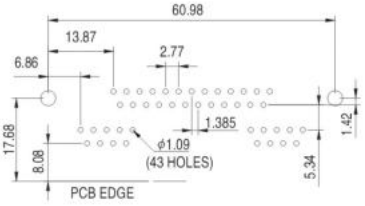








PCB HOLE PATTERN



PCB HOLE PATTERN

How to order

3 8 0 — ☐☐ — ☐☐ — ☐☐ — ☐☐ — ☐☐ — ☐☐ — ☐☐

Serie-Nr. | Nr.of contact | Consruction Types | Dimension I | Dimension G | Mounting method | Plated | Blot option

Nr.of Contact	Code
09~09	09
15~15	15
25~25	25
37~37	50

Construction Type (Top/Bottom)	Code
Male/Male	10
Male/Female	20
Female/Male	30
Female/Female	40

Plating option	Code
Gold plated	10
15U" Gold plated	15
30U" Gold plated	30
Selective gold flash plated	60

Mounting Option	Code
With dual boardlock center line 7.90mm	20
With dual boardlock center line 6.90mm	21
With rear boardlock only	30
With L bracket center line 7.90mm	40
With L bracket center line 6.90mm	41

Hexagonal bolt Option	Code
Loose HEX.Screws 4.8x11.8	10
Fixed HEX.Screws 4.8x11.8	20
Loose HEX.Screws 4.8x11.8	30
Fixed HEX.Screws 5.8x12.0	40
NON-Accessories	50

Dimension I	Code
22.86	20
19.05	30
15.88	60

Dimension G	Code
7.75	10
9.5	20

How to order

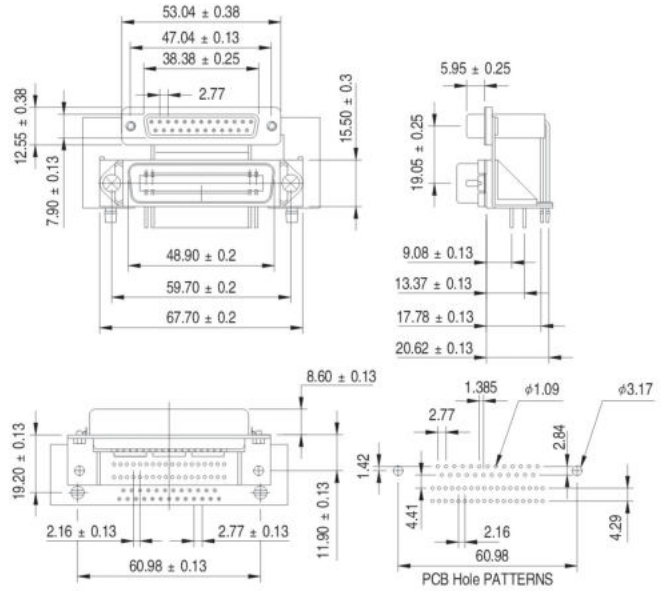
3 8 1 — ☐☐ — ☐☐

Serie-Nr. | Connector Type | Hexagonal Bolt

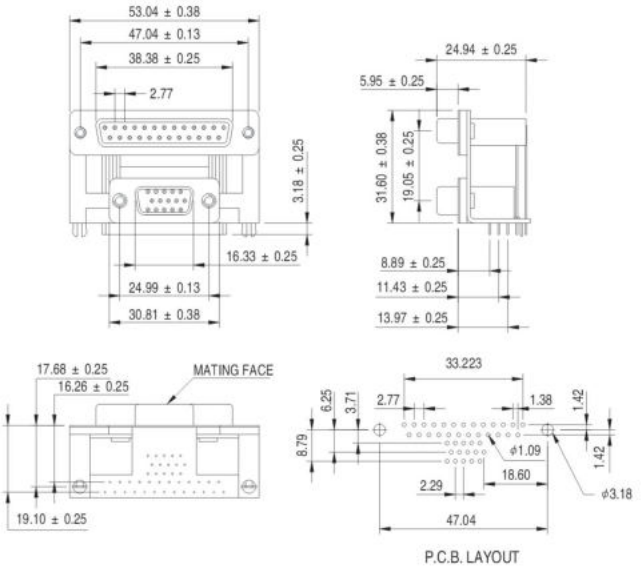
Connector Type	Code
25-09/15	10
25-09/09	20

Hexagonal Bolt Option	Code
Loose Hexagonal Bolts	10
Assembled Hexagonal Bolts	20

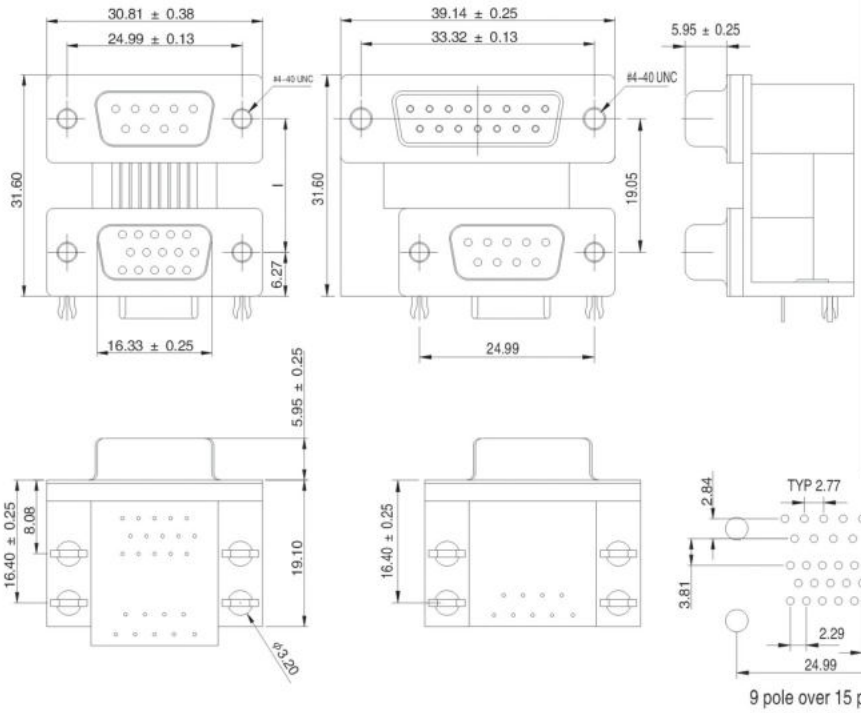
382 serier 25 poles over centronic 36 poles



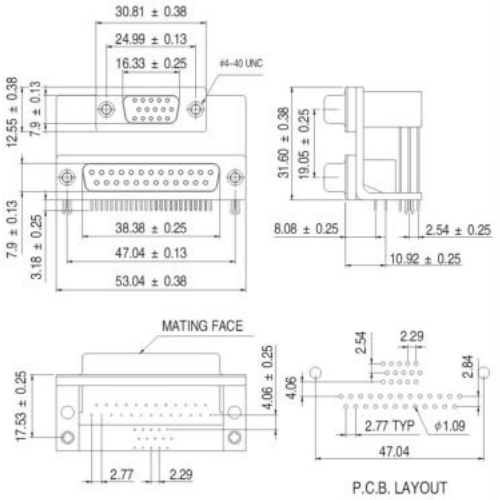
382 serier 25 poles over H.D 15poles



386 serier 9 pole over 15 poles 15 pole over 9 poles



383 serier H.D 15 poles over 25 poles



How to order

3 8 2 — ☐ ☐
Serie-Nr. Connector Type

Connector Type	Code
25M-36M	10
25F-36F	20
25M-36F	30
25F-36M	40

3 8 3 — ☐ ☐
Serie-Nr. Connector Type

Connector	Code	Connector	Code
25M-H.D15.M	10	25M-H.D15.M	50
25F-H.D15.F	20	25F-H.D15.F	60
25M-H.D15.F	30	25F-H.D15.M	70
25F-H.D15.M	40	25M-H.D15.F	80

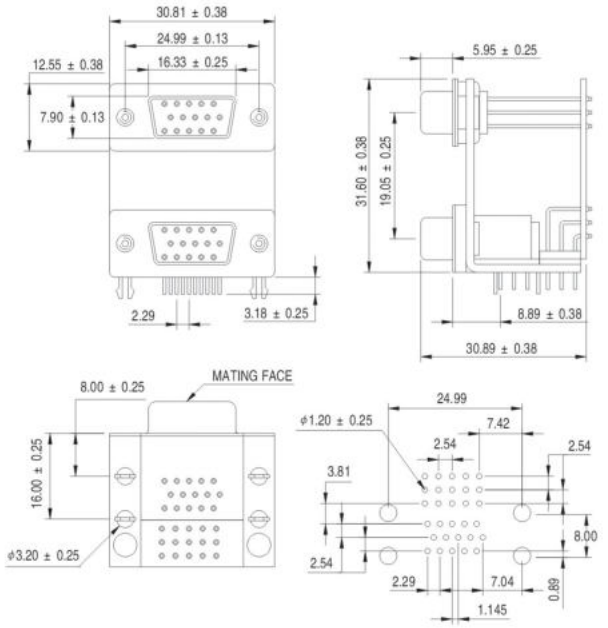
3 8 6 — ☐ ☐ — ☐ ☐ — ☐ ☐
Serie-Nr. Connector Type Dimension I Herabonal Bolt

Connector Type	Code	Connector Type	Code
9M-15M H.D	10	15M-9M	50
9F-15F H.D	20	15F-9F	60
9M-15F H.D	30	15M-9F	70
9F-15M H.D	40	15F-9M	80

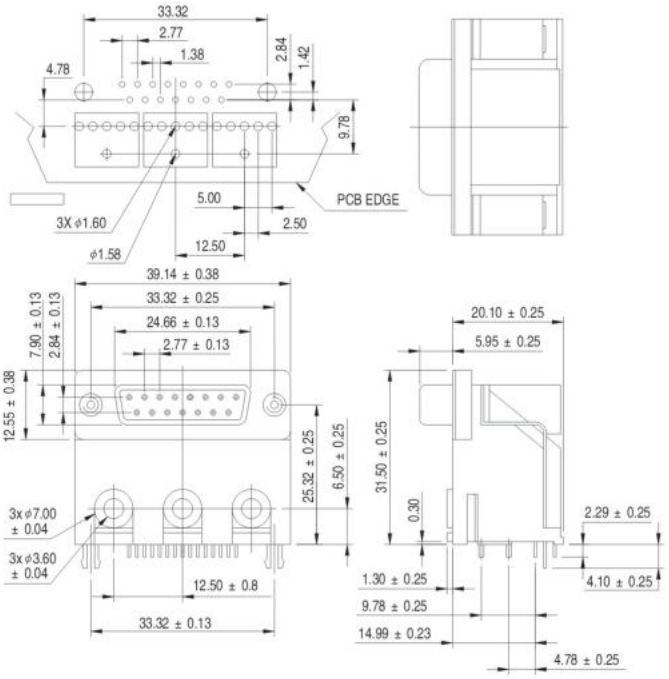
Heragonal Bolt Option	Code
Loose Heragonal Bolts	10
Assembled Herabonal Bolts	20

Dimension I	Code
15.88	60
19.05	30
22.86	20
15 Poles over 9 Poles Just have 19.05mm Option Only	

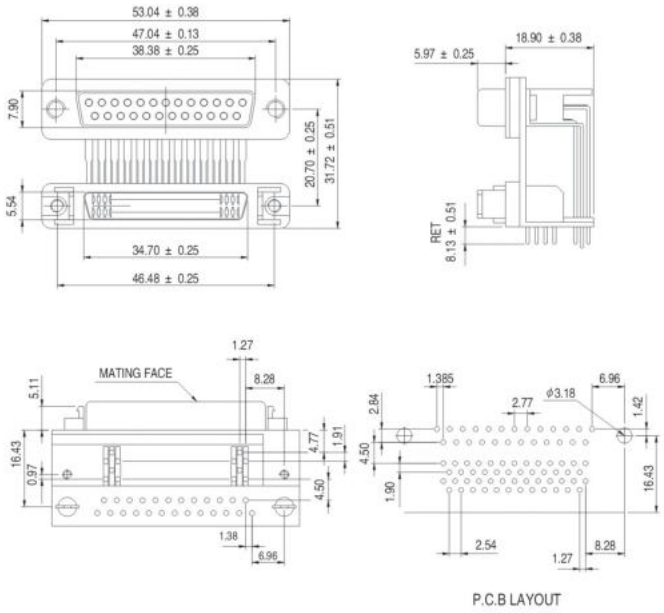
384 SERIES



385 SERIES Regular 15 Female–3 pcs. of phone jack

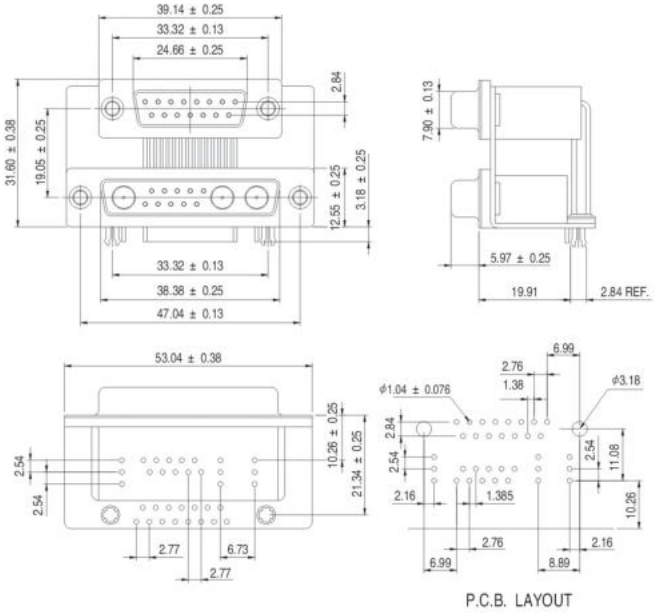


387 Serie



P.C.B LAYOUT

388 Serie



P.C.B. LAYOUT

How to order

3 8 4 – ☐☐ – ☐☐

Serie-Nr. Connector Type Plating

Connector Type	Code	Connector Type	Code
H.D.15.M–H.D15M	10	H.D.15.M–H.D15F	30
H.D.15.F–H.D15F	20	H.D.15.F–H.D15M	40

Plating option	Code
Full gold flash	10
Selective gold flash	60

How to order

3 8 5 – ☐☐

Serie-Nr. Plating

Plating option	Code
Full gold flash	00
Selective gold flash	60

How to order

3 8 7 – ☐☐

Serie-Nr. Connector Type

Connector Type	Code
25M–50F	10
25F–50F	20

How to order

3 8 8 – ☐☐

Serie-Nr. Connector Type

Connector Type	Code
15M–13W3F	10
15F–13W3F	20

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