

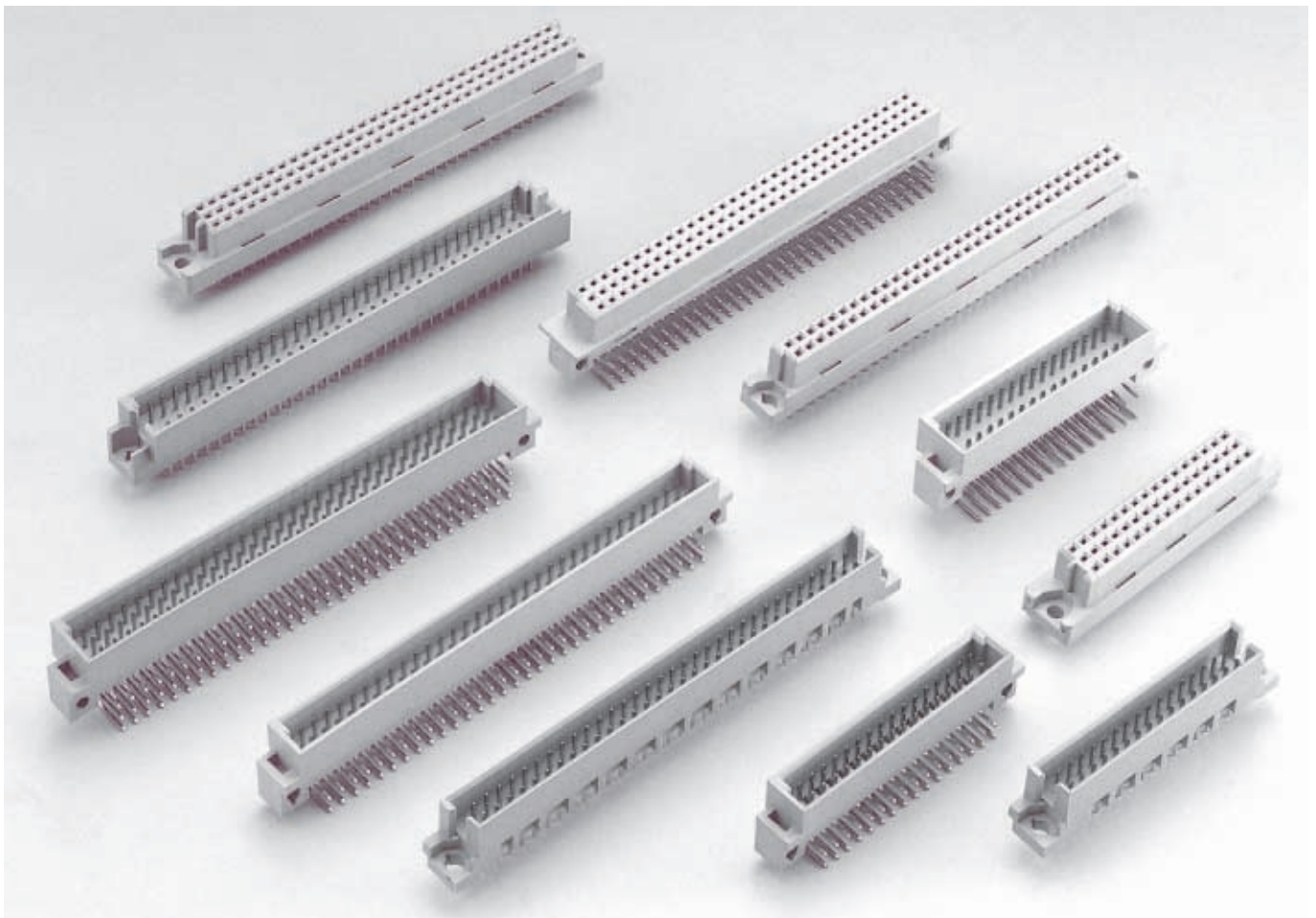
Introduction

The CR system DIN 41612, The connectors available in dip solder, IDC and P.C. board clip type, which can meet DIN standard and IEC 603-2 specifications.

DIN 41612 contacts come in a choice of selective gold plating styles with solder tail and press-fit options. It is composed of straight and right angle contacts for signal and high current connector as well as other product configurations.

These connectors are common using in current Computers, Peripherals, Test Equipment, Medical, Instrumentation and telecommunication equipment for reliable connections.

For special requirement excluding in this catalogue, please consult our sales agent or factory representative for further information.

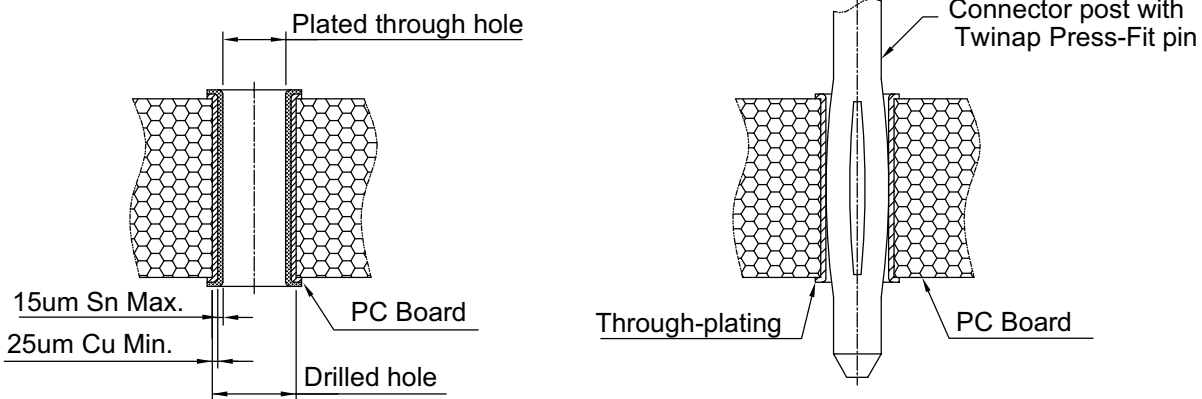


Press-Fit Contact

1. PRINTED CIRCUIT BOARD REQUIREMENTS:

Series	DIN 41612 Connector	High Density Connector
	CRMR	CRMD,CRFD,CRMP,CRFP
P.C.B Material	Fiber glass filled epoxy(FR 4,G 10)	
P.C.B Thickness	1.6~3.2mm(.62"~.120")	
Drilled Hole	1.15 ± 0.0127mm(.045" ± .0005")	0.81~0.83mm(.032"~.033")
Copper Plating Thickness	25~50 μ m(.001"~.002")	
Tin Plating Thickness	5~15 μ m(.0002"~.0006")	
Plated Through Hole(P.T.H)	0.94~1.09(.037"~.043")	0.65~0.77mm(.025"~.030")

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



2. PRESS IN AND RETENTION FORCES TO P.C.B HOLE

2.1 DIN 41612 CONNECTOR PRESS FIT PIN

DIN 41612 Connector press fit type, press in and retention force for single pin in a plated through PCB hole with a diameter of 0.94mm~1.09mm

PCB hole	0.94~1.09mm	
Press in force per pin:	150N Max	
Retention force per pin:	50N Min	

2.2 HIGH DENSITY CONNECTOR PRESS FIT PIN

High Density Connector press fit type, press in and retention force for single in a plated through PCB hole with a diameter 0.77mm as below

	Signal	Power
Press in force per pin	100 N Max.	300N Max.
Retention force per pin:	30 N Min.	90 N Min.

System CR - Technical Specifications

TEST METHODS FOR ELECTRONIC CONNECTOR IS ACCORDING TO FOLLOWING MILITARY STANDARD:

- Dielectric Withstanding Voltage - Per MIL-STD-1344A method 3001.1
- Contact Resistance - Per MIL-STD-1344A method 3002.1
- Insulation Resistance - Per MIL-STD-1344A method 3003.1
- Solderability - Per MIL-STD-202F method 208D

DIN 41612 EUROCARD Connector

Electrical Data-

- Current rating: 2 Amps
- Dielectric Withstanding: 1000 VAC for one minute
- Contact Resistance: < 30 mΩ
- Insulation Resistance: > 1000 MΩ
- Operating Temperature: -55°C - +105°C

Construction-

- Insulator: Color Gray , Glass Filled Polyester
- Flammability Rating: UL 94V-0
- Receptacle Contacts: Phosphor Bronze
- Plug Contacts: Brass

HIGH DENSITYS DIP TYPE Connector

Electrical Data-

- Current rating: 1 Amps
- Dielectric Withstanding: 1000 VAC for one minute
- Contact Resistance: < 30 mΩ
- Insulation Resistance: > 1000 MΩ
- Operating Temperature: -65°C - +125°C

Construction-

- Insulator: Color Gray , LCP
- Flammability Rating: UL 94V-0
- Receptacle Contacts: Phosphor Bronze
- Plug Contacts: Brass

HIGH DENSITYS POWER TYPE Connector

Electrical Data-

- Current rating: 3 Amps
- Dielectric Withstanding: 1000 VAC for one minute
- Contact Resistance: < 30 mΩ
- Insulation Resistance: > 1000 MΩ
- Operating Temperature: -65°C - +125°C

Construction-

- Insulator: Color Gray , LCP
- Flammability Rating: UL 94V-0
- Receptacle Contacts: Phosphor Bronze
- Plug Contacts: Brass

Ordering Code

① CR ② M ③ B ④ 64 ⑤ 4 ⑥ A ⑦ H ⑧ A ⑨ 0

① Series No.

② Contacts style:

- M = Male
- F = Female
- Y = Half / Male
- X = Half / Female

③ Type: B, C, Q, R, H, F

④ No. of Circuits:

See table on pages

⑤ Row with contacts:

- 1= a row, 2= b row, 3= c row, 4= ab row,
- 5= ac row, 6= bc row, 7= abc row, 8= dbz row,
- 9= dz row, A= z row

⑨ Other options:

- 0 = Solder Type
- F = Press Fit Type
- *Special option Consult manufacturer

⑧ Tail length: See Drawing

⑦ Tail style:

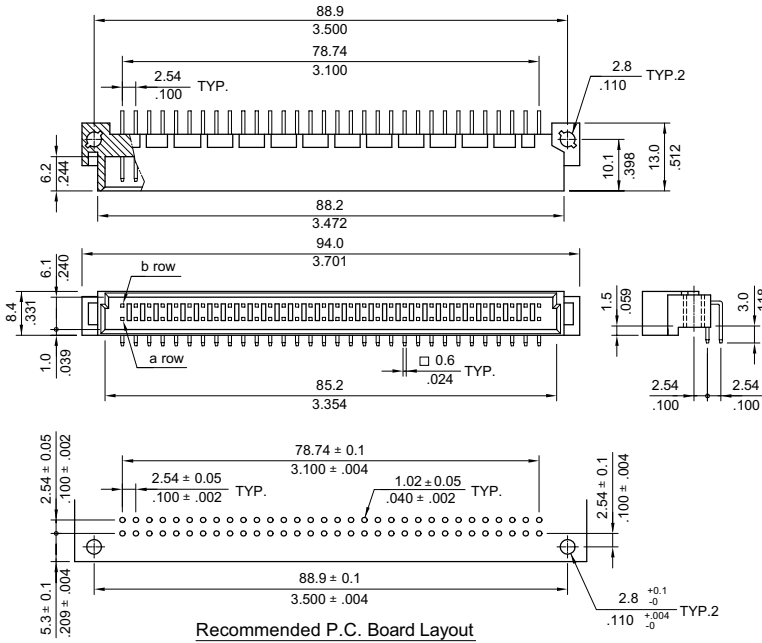
- V = Straight, H = Right angle

⑥ Plating code:

- A= Selective Gold flash over Nickel
- B= Selective 15µin Gold plated over Nickel
- C= Selective 30µin Gold plated over Nickel

CRMB Series Type-B DIN 41612 Plug Connector

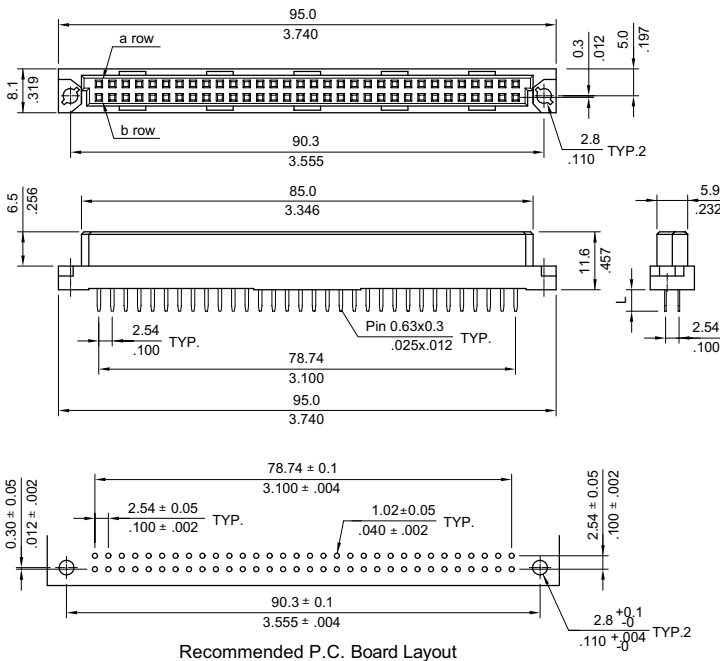
- ⊙ Mates CRFB and CRFQ Receptacle Connectors
- ⊙ Selective Gold plated



Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRMB644*HA0	64	a+b	2.54mm
CRMB321*HA0	32	a	2.54mm
CRMB324*HA0	32	a+b All even no.	5.08mm
CRMB161*HA0	16	a All even no.	5.08mm

CRFB Series Type-B DIN 41612 Receptacle Connector

- ⊙ Mates CRMB and CRMQ Plug Connectors
- ⊙ Selective Gold plated

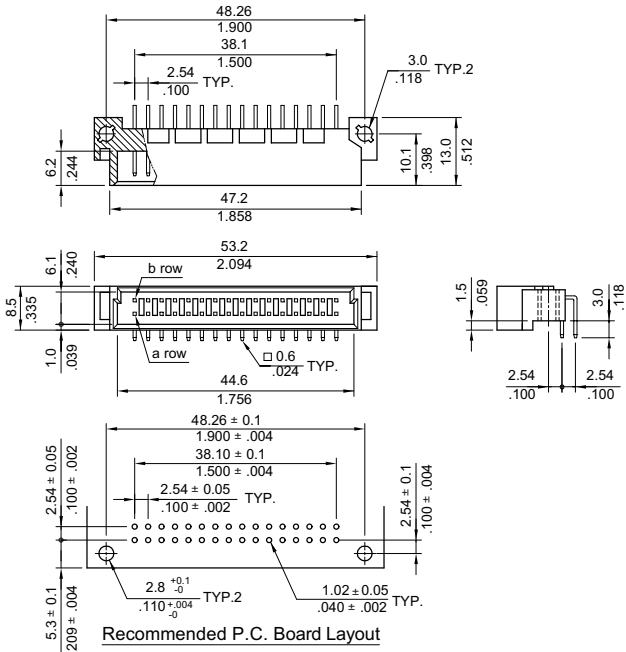


Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRFB644*V*0	64	a+b	2.54mm
CRFB321*V*0	32	a	2.54mm
CRFB324*V*0	32	a+b All even no.	5.08mm
CRFB161*V*0	16	a All even no.	5.08mm

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRYB Series Type- Half B DIN 41612 Plug Connector

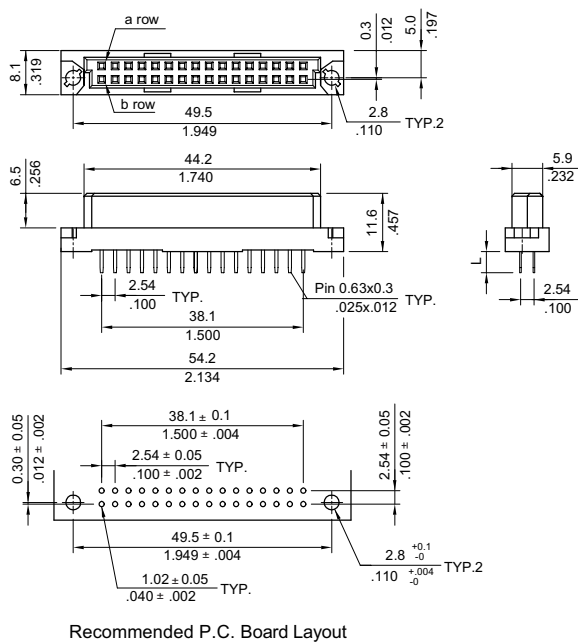
- Mates CRXB and CRXQ Receptacle Connectors
- Selective Gold plated



Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRYB324*HA0	32	a+b	2.54mm
CRYB161*HA0	16	a	2.54mm
CRYB164*HA0	16	a+b All even no.	5.08mm

CRXB Series Type- Half B DIN 41612 Receptacle Connector

- Mates CRYB and CRYQ Plug Connectors
- Selective Gold plated

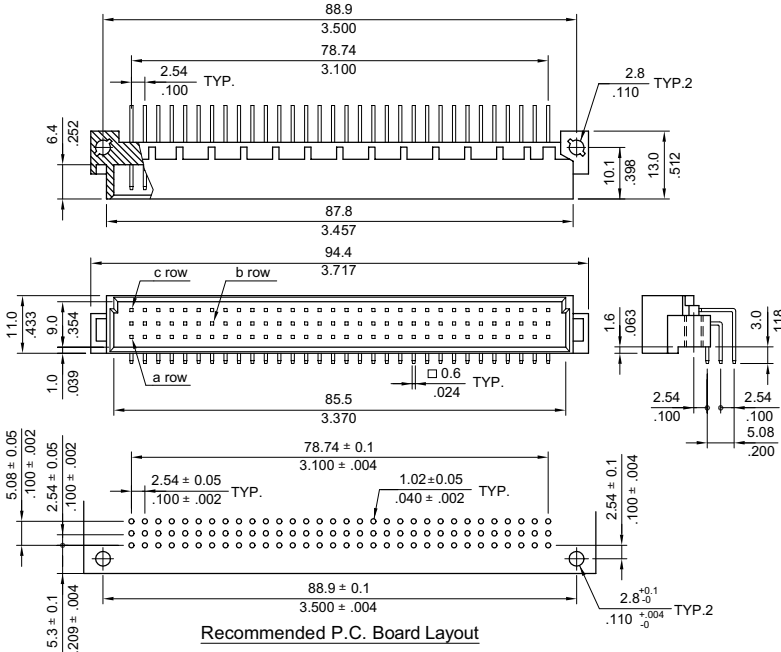


Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRXB324*V*0	32	a+b	2.54mm
CRXB161*V*0	16	a	2.54mm
CRFB324*V*0	16	a+b All even no.	5.08mm

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRMC Series Type-C DIN 41612 Plug Connector

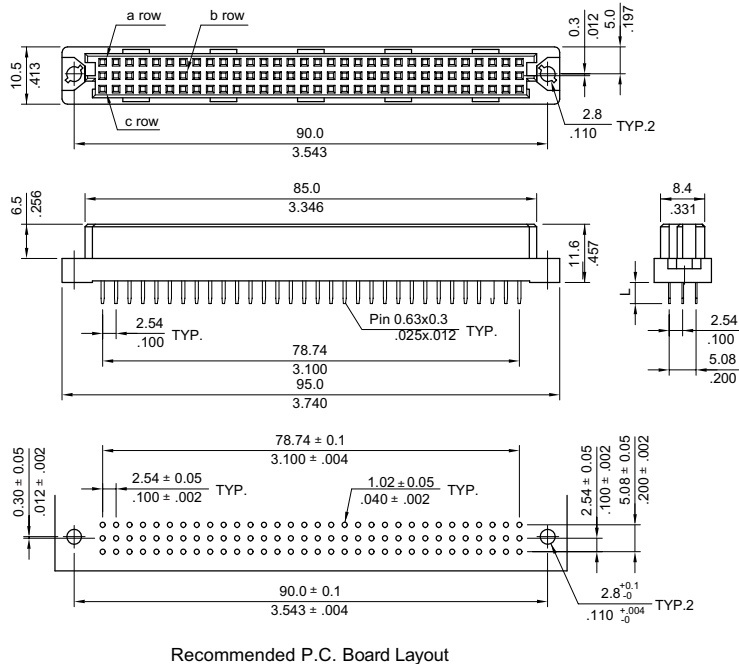
- ⊙ Mates CRFC and CRFR Receptacle Connectors
- ⊙ Selective Gold plated



Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRMC967*HA0	96	a+b+c c b a	2.54mm
CRMC645*HA0	64	a+c c b a	
CRMC644*HA0	64	a+b c b a	
CRMC321*HA0	32	a c b a	5.08mm
CRMC487*HA0	48	a+b+c All even no. c b a	
CRMC325*HA0	32	a+c All even no. c b a	

CRFC Series Type-C DIN 41612 Receptacle Connector

- ⊙ Mates CRMC and CRMR Plug Connectors
- ⊙ Selective Gold plated



Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRFC967*V0	96	a+b+c a b c	2.54mm
CRFC645*V0	64	a+c a b c	
CRFC644*V0	64	a+b a b c	
CRFC321*V0	32	a a b c	5.08mm
CRFC487*V0	48	a+b+c All even no. a b c	
CRFC325*V0	32	a+c All even no. a b c	

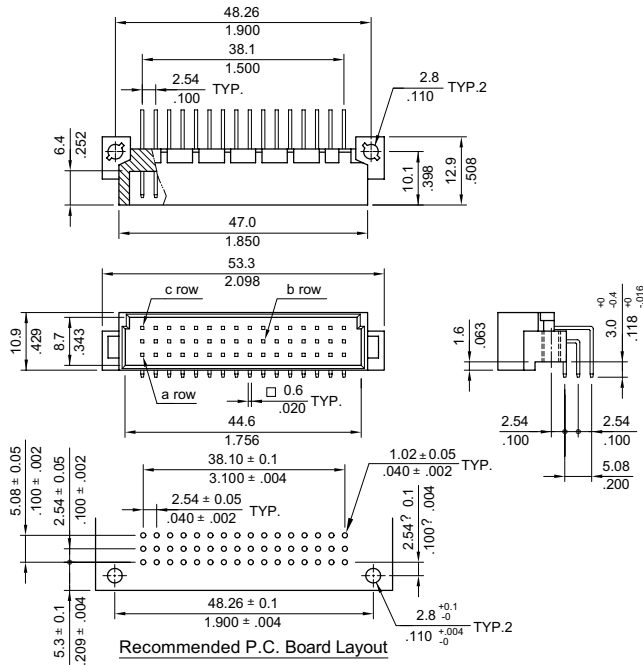
Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRYC Series Type-Half C DIN 41612 Plug Connectors

- Mates CRXC and CRXR Receptacle Connector
- Selective Gold plated



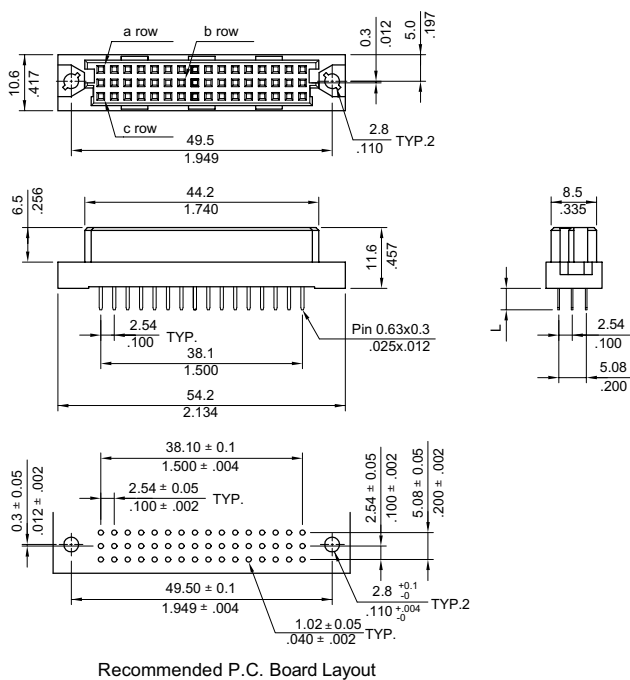
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Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRYC487*HA0	48	a+b+c	2.54mm
CRYC325*HA0	32	a+c	
CRYC161*HA0	16	a	
CRYC247*HA0	24	a+b+c All even no.	5.08mm
CRYC165*HA0	16	a+c All even no.	
CRYC081*HA0	8	a All even no.	

CRXC Series Type-Half C DIN 41612 Receptacle Connectors

- Mates CRYC and CRYR Receptacle Connector
- Selective Gold plated

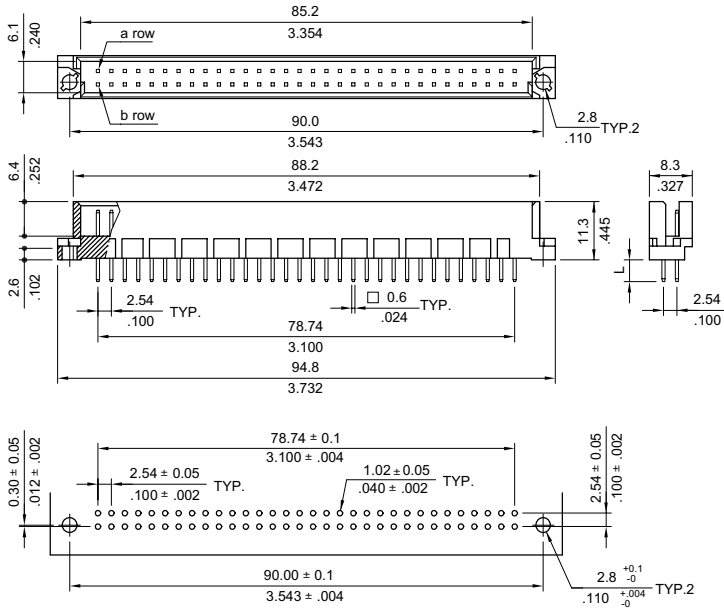


Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRXC487*V*0	48	a+b+c	2.54mm
CRXC325*V*0	32	a+c	
CRXC161*V*0	16	a	
CRXC247*V*0	24	a+b+c All even no.	5.08mm
CRXC165*V*0	16	a+c All even no.	
CRXC081*V*0	8	a All even no.	

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRMQ Series Type-Q DIN 41612 Plug Connector

- ⊙ Mates CRFQ and CRFB Receptacle Connectors
- ⊙ Selective Gold plated



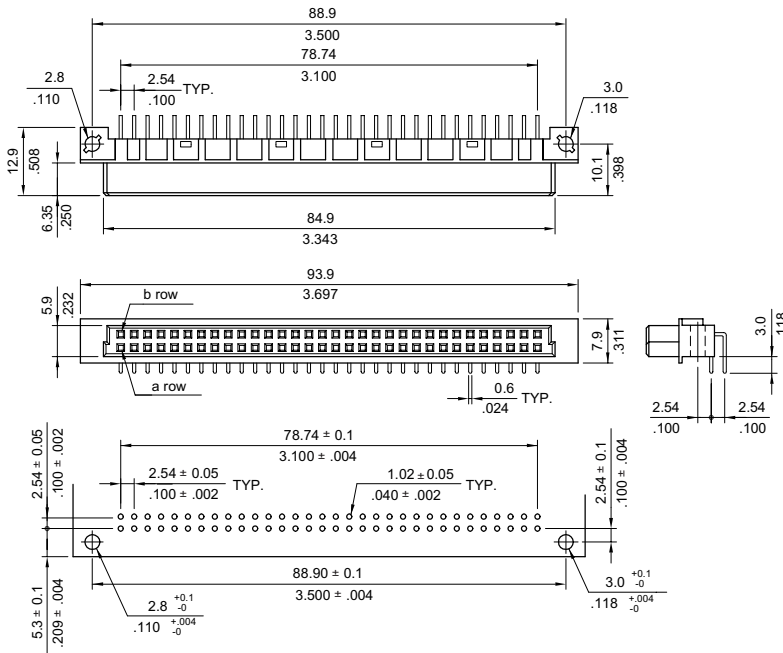
Recommended P.C. Board Layout

Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRMQ644*V*0	64	a+b	2.54mm
CRMQ321*V*0	32	a	2.54mm
CRMQ324*V*0	32	a+b All even no.	5.08mm
CRMQ161*V*0	16	a All even no.	5.08mm

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRFQ Series Type-Q DIN 41612 Receptacle Connector

- ⊙ Mates CRMB and CRMQ Plug Connectors
- ⊙ Selective Gold plated

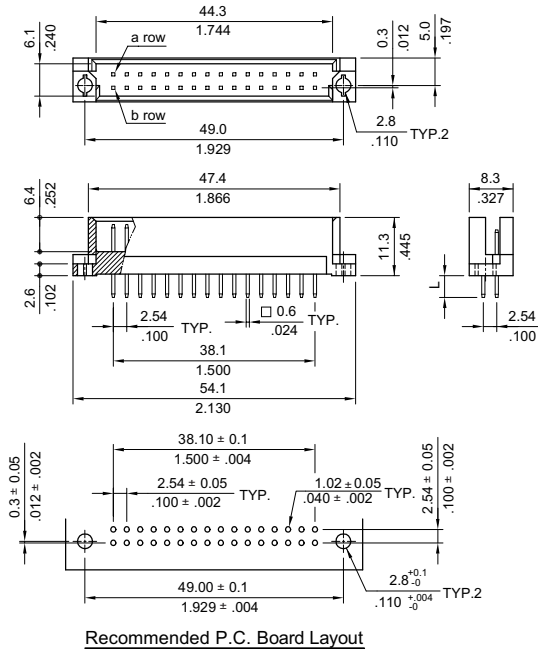


Recommended P.C. Board Layout

Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRFQ644*HA0	64	a+b	2.54mm
CRFQ321*HA0	32	a	2.54mm
CRFQ324*HA0	32	a+b All even no.	5.08mm
CRFQ161*HA0	16	a All even no.	5.08mm

CRYQ Series Type- Half Q DIN 41612 Plug Connector

- Mates CRXQ and CRXB Receptacle Connectors
- Selective Gold plated

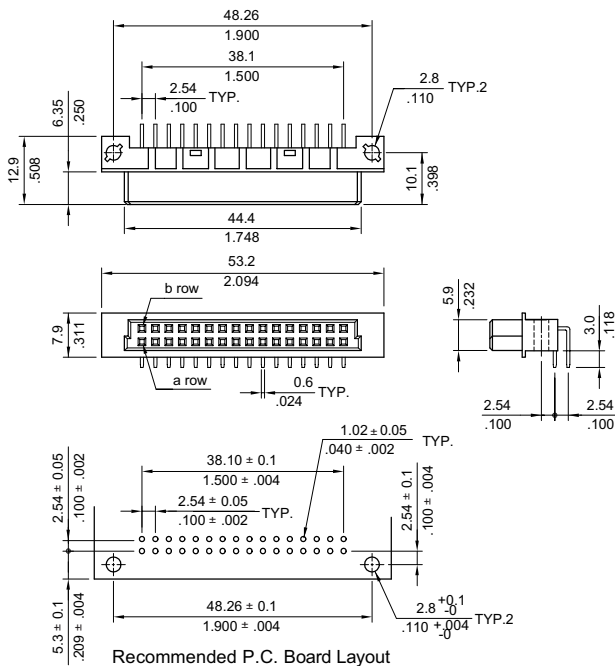


Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRYQ324*V*0	32	a+b	2.54mm
CRYQ161*V*0	16	a	2.54mm
CRYQ164*V*0	16	a+b All even no.	5.08mm

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRXQ Series Type- Half Q DIN 41612 Receptacle Connector

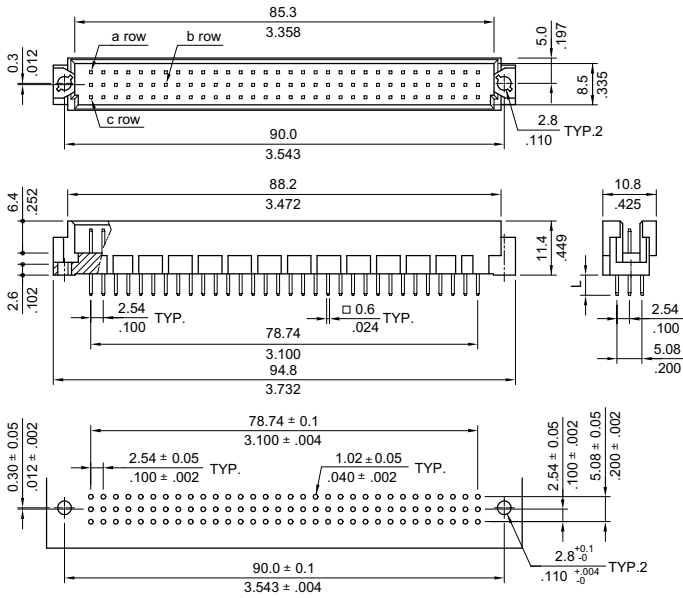
- Mates CRYQ and CRYB Plug Connectors
- Selective Gold plated



Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRXQ324*HA0	32	a+b	2.54mm
CRXQ161*HA0	16	a	2.54mm
CRXQ164*HA0	16	a+b All even no.	5.08mm

CRMR Series Type-R DIN 41612 Plug Connector

- ⊙ Mates CRFR and CRFC Receptacle Connectors
- ⊙ Selective Gold plated



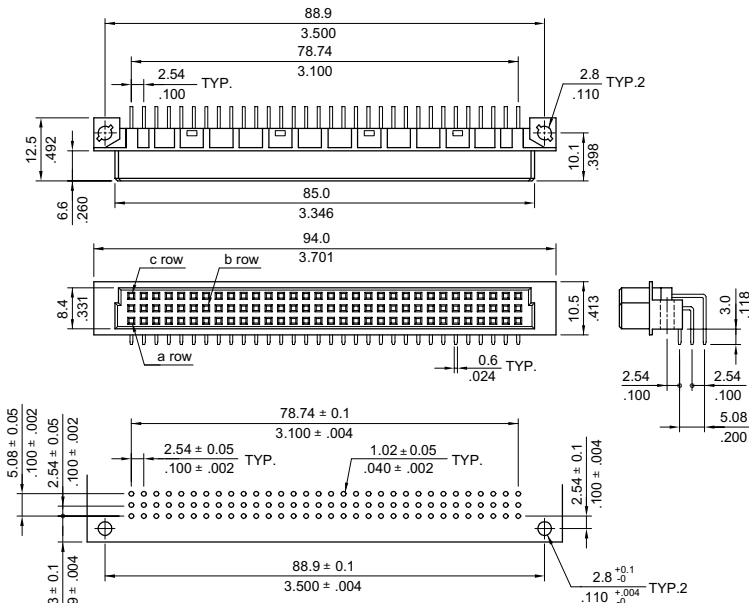
Recommended P.C. Board Layout

Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRMR967*V*0	96	a+b+c	2.54mm
CRMR645*V*0	64	a+c	
CRMR644*V*0	64	a+b	
CRMR321*V*0	32	a	5.08mm
CRMR487*V*0	48	a+b+c All even no.	
CRMR325*V*0	32	a+c All even no.	

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRFR Series Type-R DIN 41612 Receptacle Connector

- ⊙ Mates CRMR and CRMC Plug Connectors
- ⊙ Selective Gold plated

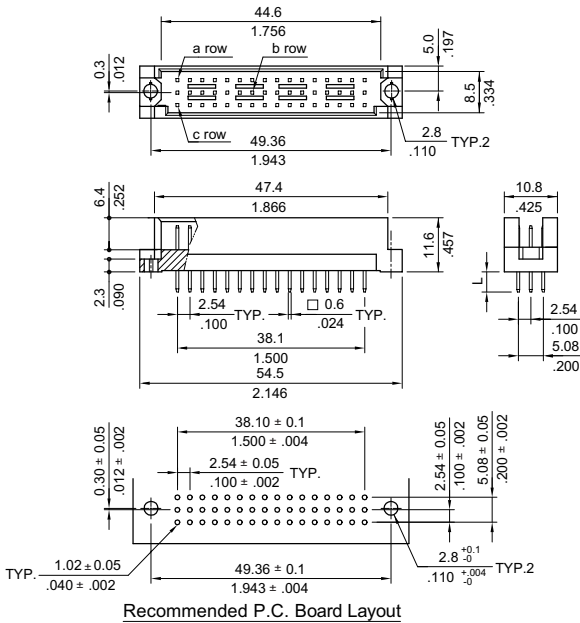


Recommended P.C. Board Layout

Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRFR967*HA0	96	a+b+c	2.54mm
CRFR645*HA0	64	a+c	
CRFR644*HA0	64	a+b	
CRFR321*HA0	32	a	5.08mm
CRFR487*HA0	48	a+b+c All even no.	
CRFR325*HA0	32	a+c All even no.	

CRYR Series Type-Half R DIN 41612 Plug Connectors

- ⊙ Mates CRXR and CRXC Receptacle Connector
- ⊙ Selective Gold plated

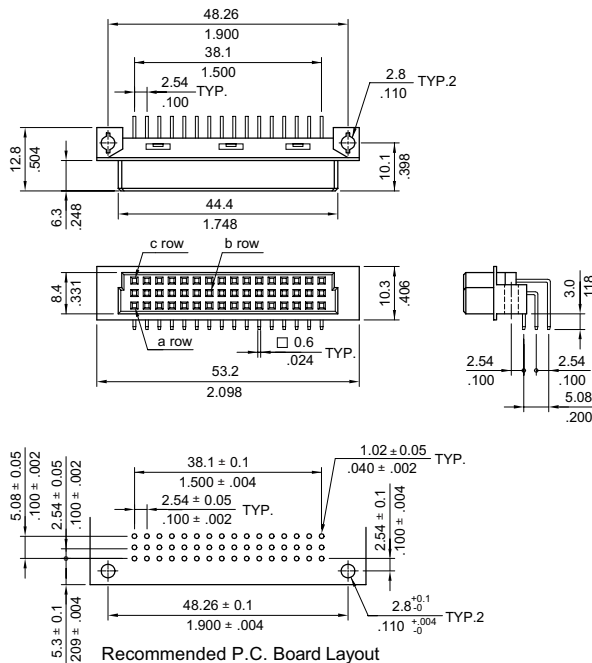


Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRYR487*V*0	48	a+b+c	2.54mm
CRYR325*V*0	32	a+c	
CRYR161*V*0	16	a	
CRYR247*V*0	24	a+b+c All even no.	5.08mm
CRYR165*V*0	16	a+c All even no.	
CRYR081*V*0	8	a	

Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRXR Series Type-Half R DIN 41612 Receptacle Connectors

- ⊙ Mates CRYR and CRYC Receptacle Connectors
- ⊙ Selective Gold plated



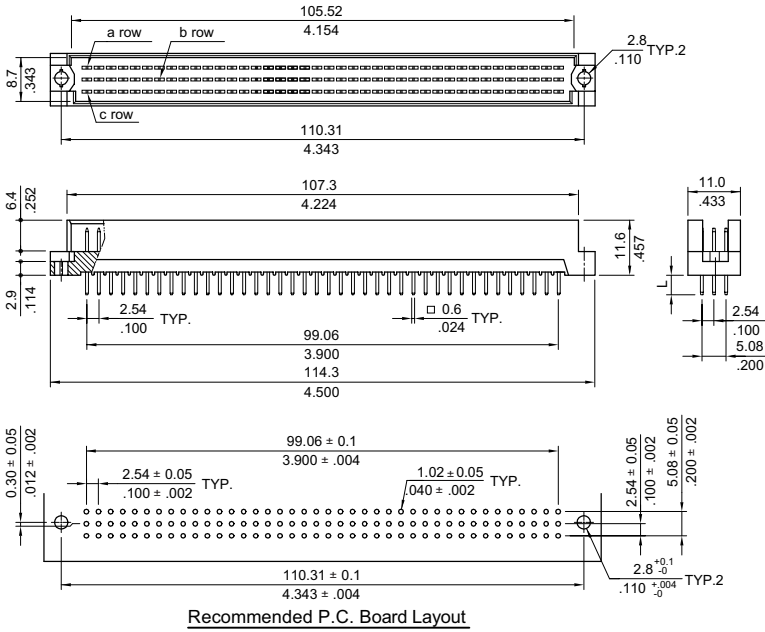
Part No.	Number of Contacts	Rows / Positions with contact	Pitch
CRXR487*HA0	48	a+b+c	2.54mm
CRXR325*HA0	32	a+c	
CRXR161*HA0	16	a	
CRXR247*HA0	24	a+b+c All even no.	5.08mm
CRXR165*HA0	16	a+c All even no.	
CRXR081*HA0	8	a All even no.	

CRMR Series Type-R 120Pin DIN 41612 Plug Connector

- ⊙ Mates CRFR 120Pin Receptacle Connectors
- ⊙ Selective Gold plated
- ⊙ Solder type and Press Fit type available



Solder Type

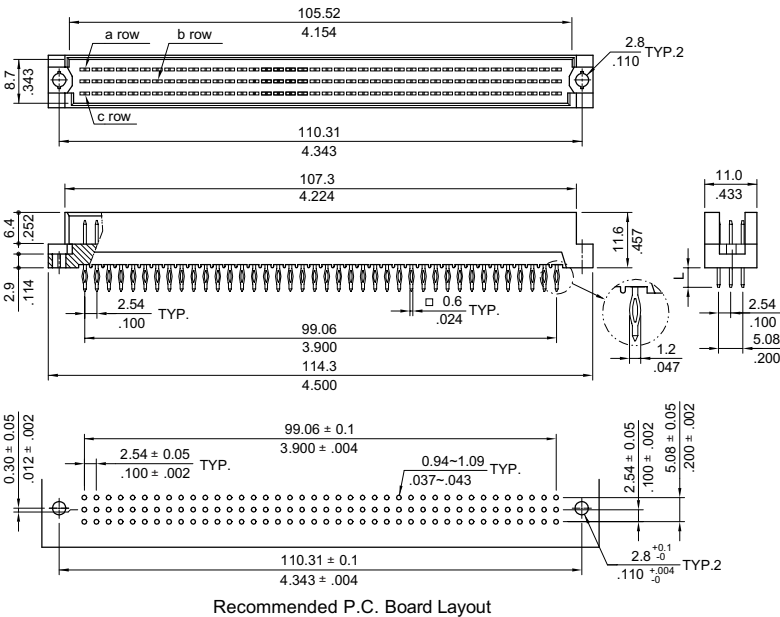


Recommended P.C. Board Layout

Part No.	No. of Contacts	Rows / Positions with contact	Pitch
CRMRX17*VA0	120	a+b+c 	2.54mm
CRMR805*VA0	80	a+c 	
CRMR401*VA0	40	a 	
CRMR607*VA0	60	a+b+c All even no. 	5.08mm
CRMR405*VA0	40	a+c All even no. 	
CRMR201*VA0	20	a 	

Termination Version	Code	DIM. L
DIP Solder style	A	4.6mm
	B	6.3mm
Wire warp style	C	13.0mm
	D	17.0mm

Press Fit Type



Recommended P.C. Board Layout

Part No.	No. of Contacts	Rows / Positions with contact	Pitch
CRMRX17*VAF	120	a+b+c 	2.54mm
CRMR805*VAF	80	a+c 	
CRMR401*VAF	40	a 	
CRMR607*VAF	60	a+b+c All even no. 	5.08mm
CRMR405*VAF	40	a+c All even no. 	
CRMR201*VAF	20	a 	

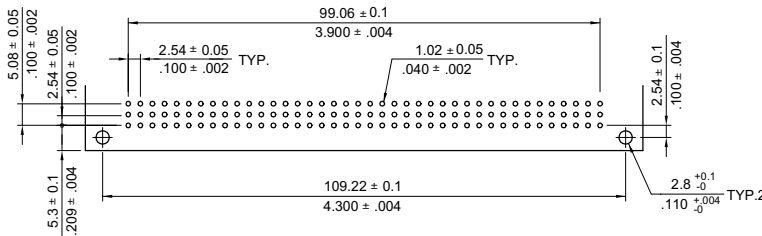
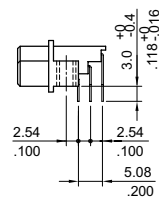
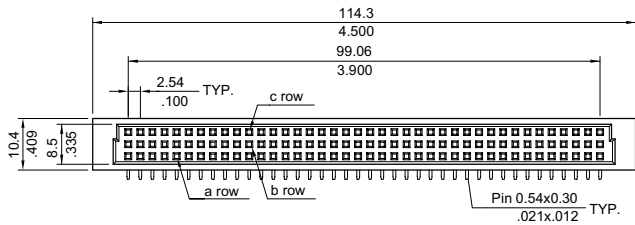
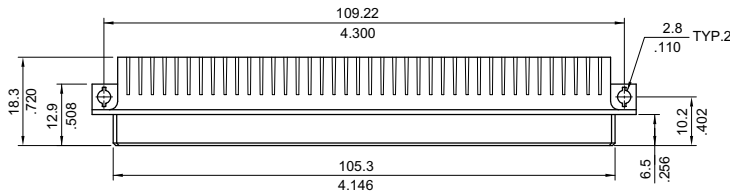
Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	2.5mm
Wire warp style	C	13.0mm
	D	17.0mm

CRFR Series Type-R 120Pin DIN 41612 Receptacle Connector

- ⊙ Mates CRMR 120Pin Plug Connectors
- ⊙ Selective Gold plated



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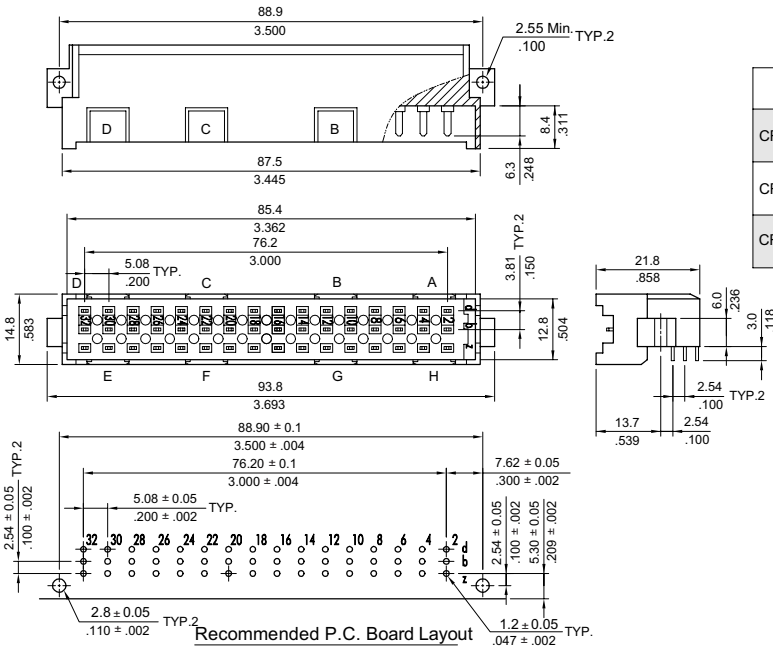
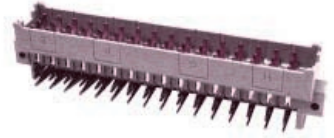


Recommended P.C. Board Layout

Part No.	No. of Contacts	Rows / Positions with contact	Pitch
CRFRX17*HA0	120	a+b+c	2.54mm
CRFR805*HA0	80	a+c	
CRFR401*HA0	40	a	
CRFR607*HA0	60	a+b+c All even no.	5.08mm
CRFR405*HA0	40	a+c All even no.	
CRFR201*HA0	20	a	

CRMF Series Type-F DIN 41612 Plug Connector

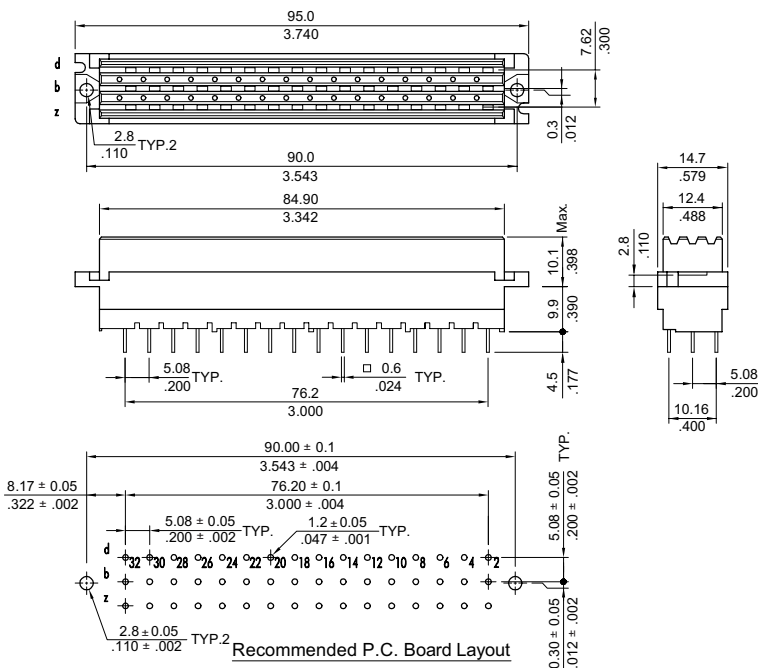
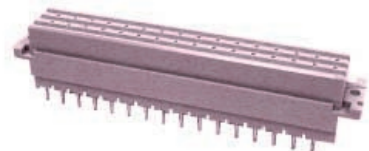
- ⊙ Mates CRFF and CRFC Receptacle Connectors
- ⊙ Selective Gold plated



Part No.	No. of Contacts	Rows / Positions with contact	Pitch
CRMF488*HA0	48	d+b+z 	5.08mm
CRMF329*HA0	32	d+z 	
CRMF16A*HA0	16	z 	

CRFF Series Type-F DIN 41612 Receptacle Connector

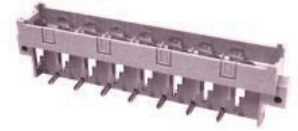
- ⊙ Mates CRMF and CRMC Plug Connectors
- ⊙ Selective Gold plated



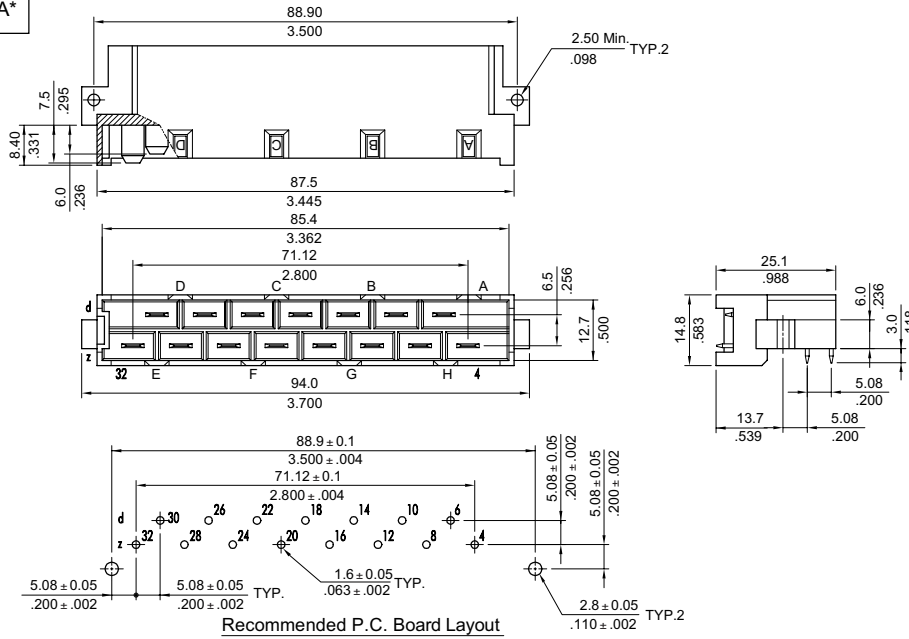
Part No.	No. of Contacts	Rows / Positions with contact	Pitch
CRFF48*VA0	48	d+b+z 	5.08mm
CRFF329*VA0	32	d+z 	
CRFF16A*VA0	16	z 	

CRMH Series Type-H DIN 41612 Plug Connector

- Mates CRFH and CRFC Receptacle Connectors
- Selective Gold plated



P/N	CRMH159*HA*
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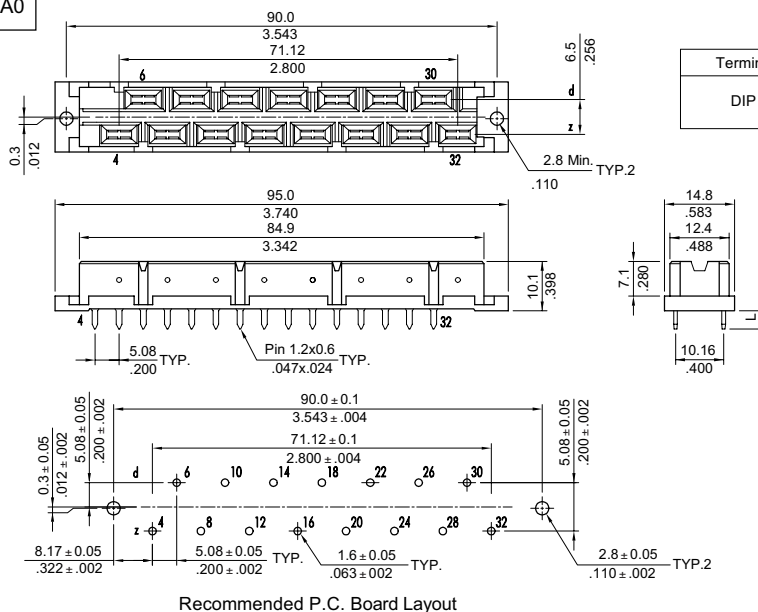
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CRFH Series Type-H DIN 41612 Receptacle Connector

- Mates CRMH and CRMC Plug Connectors
- Selective Gold plated



P/N	CRFH159*VA0
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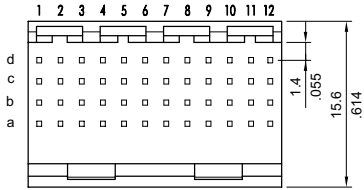
Termination Version	Code	DIM. L
DIP Solder style	A	4.0mm
	B	10.0mm

CRMD Series High Density Plug Connector

- ⊙ Mates CRFD Receptacle Connectors
- ⊙ Selective Gold plated
- ⊙ Solder type and Press Fit type available

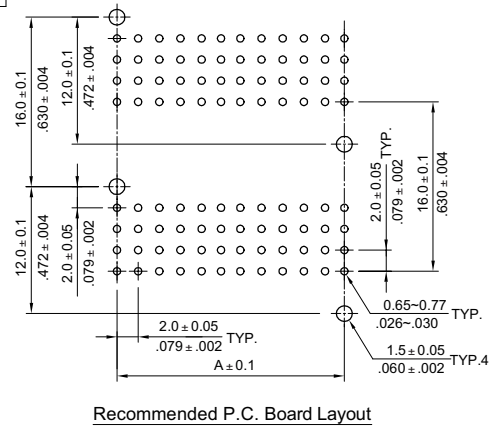
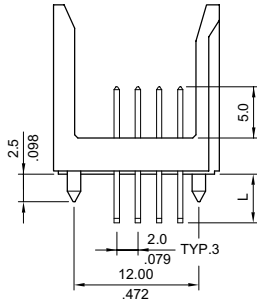
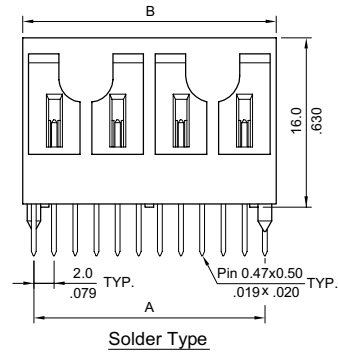


P/N	CRMD***A**0
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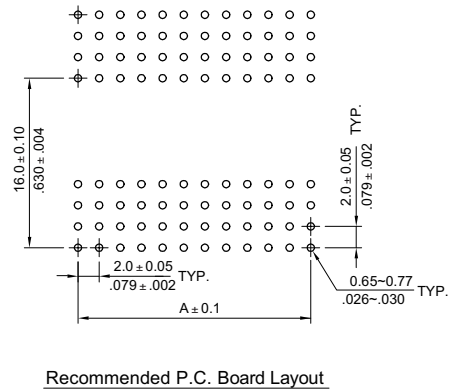
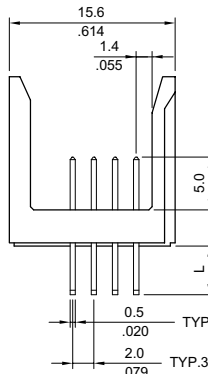
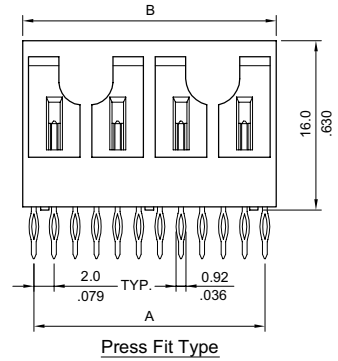


Circuits	Dimension	
	A	B
24	10.0(.394)	11.95(.470)
48	22.0(.866)	23.95(.943)
96	46.0(1.811)	47.95(1.888)
192	94.0(3.701)	95.95(3.778)

Termination Version	Code	DIM. L
DIP Solder style	A	4.3mm
	B	6.3mm
Wire warp style	C	13.6mm
	D	17.0mm



P/N	CRMD***A**F
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Ordering Code

1
2
3
4
5
6

CRMD
048
A
A
A
0

1 Series No.
2 Circuits:
 024,048,096,192

3 Rows loaded with Contacts: A= abcd row
4 Plating code:
 A= Selective Gold flash over Nickel
 B= Selective 15µin Gold plated over Nickel
 C= Selective 30µin Gold plated over Nickel

5 Termination tail length:
 A= Dim L. 4.3mm ; B= Dim L. 6.3mm
 C= Dim L. 13.6mm ; D= Dim L. 17.0mm
6 DIP Style:
 0= Solder Type
 F= Press Fit Type

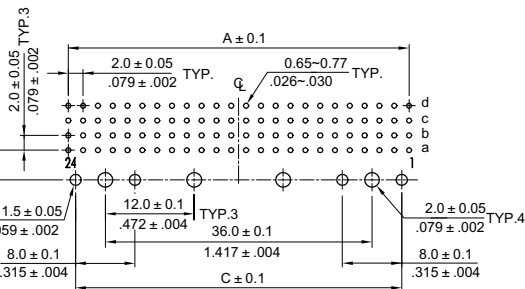
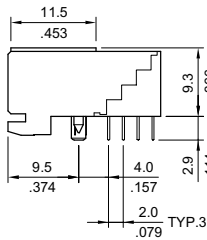
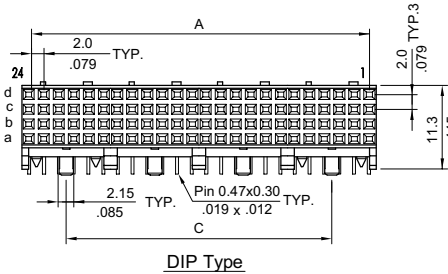
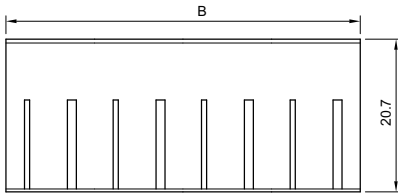
CRFD Series High Density Receptacle Connector

- Mates CRMD Plug Connectors
- Selective Gold plated
- Solder type and Press Fit type available

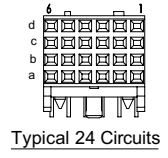


CR

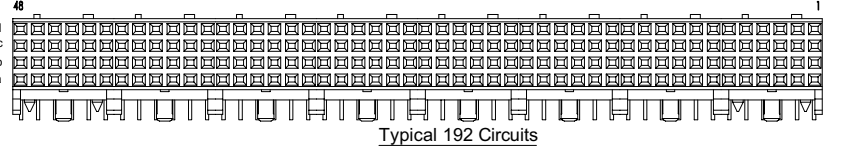
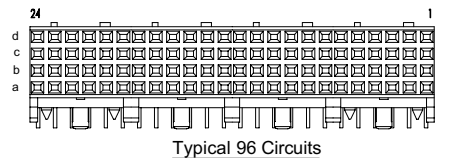
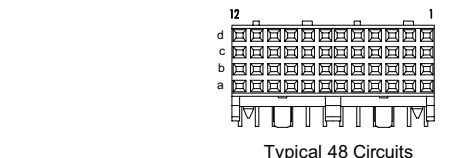
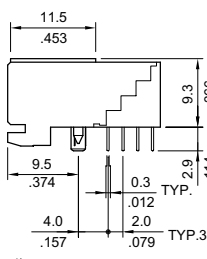
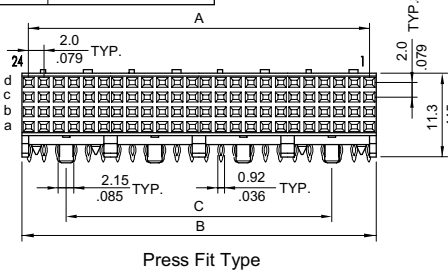
P/N CRFD***A*A0



Circuits	Dimension		
	A	B	C
24	10.0(.394)	12.0(.472)	8.0(.315)
48	22.0(.866)	24.0(.945)	12.0(.472)
96	46.0(1.811)	48.0(1.890)	36.0(1.417)
192	94.0(3.701)	96.0(3.780)	84.0(3.307)



P/N CRFD***A*AF



Ordering Code

① **CRFD** ② **024** ③ **A** ④ **A** ⑤ **A** ⑥ **0**

- ① Series No.
- ② Circuits:
024, 048, 096, 192
- ③ Rows loaded with Contacts: A= abcd row
- ④ Plating code:
A= Selective Gold flash over Nickel
B= Selective 15µin Gold plated over Nickel
C= Selective 30µin Gold plated over Nickel
- ⑤ Termination tail length:
A= 2.9mm
- ⑥ DIP Style:
0= Solder Type
F= Press Fit Type

CRMP/CRFP Series High Density Connector

- ⊙ Mates CRFD Receptacle Connectors
- ⊙ Selective Gold plated
- ⊙ Solder type and Press Fit type available

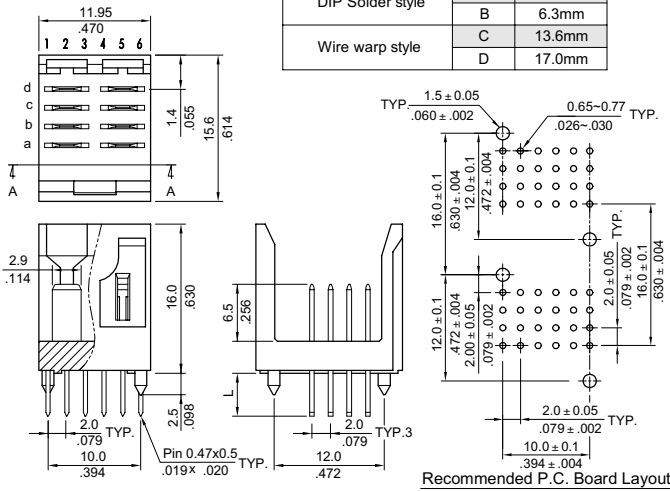


Solder Type

Press Fit Type

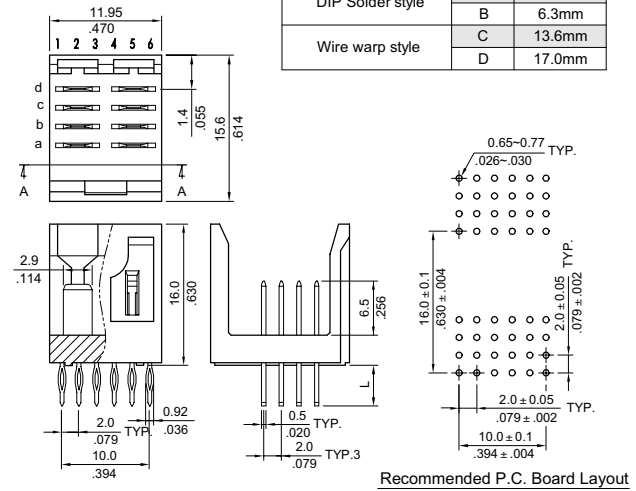
P/N	CRMP008A**0
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Termination Version	Code	DIM. L
DIP Solder style	A	4.3mm
	B	6.3mm
Wire warp style	C	13.6mm
	D	17.0mm

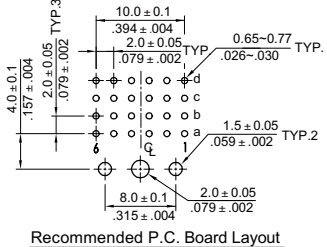


P/N	CRMP008A**F
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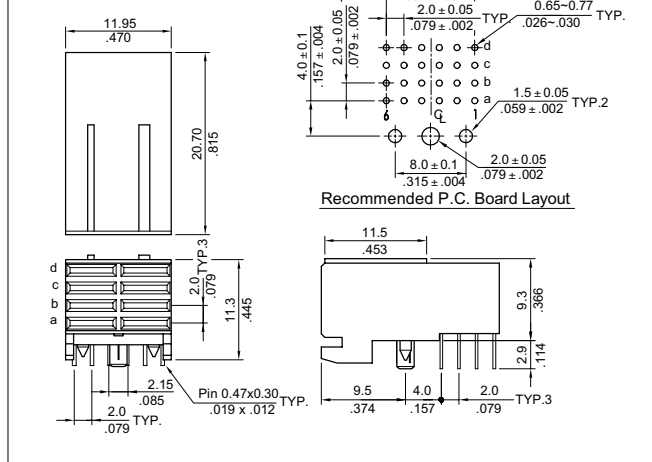
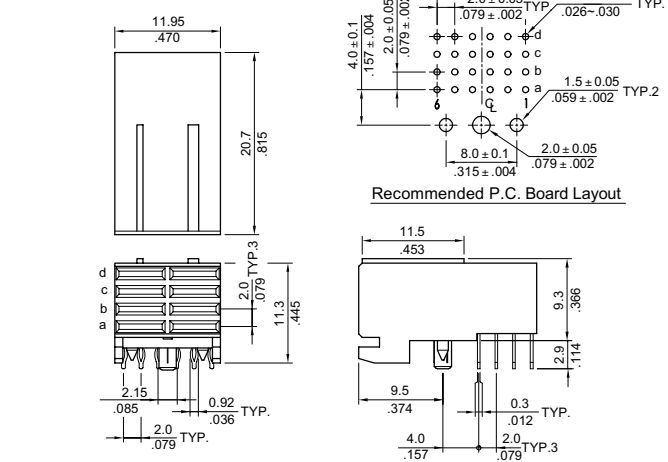
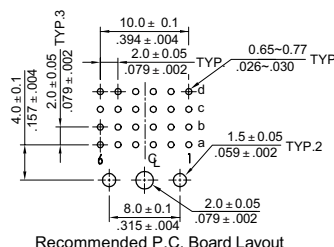
Termination Version	Code	DIM. L
DIP Solder style	A	4.3mm
	B	6.3mm
Wire warp style	C	13.6mm
	D	17.0mm



P/N	CRFP008A*A0
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P/N	CRFP008A*AF
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Ordering Code



- ❶ Series No.
CRMP= Plug
CRFP= Receptacle
- ❷ Circuits:
008

- ❸ Rows loaded with Contacts: A= abcd row
- ❹ Plating code:
A= Selective Gold flash over Nickel
B= Selective 15µin Gold plated over Nickel
C= Selective 30µin Gold plated over Nickel

- ❺ Termination tail length:
A= 2.9mm
- ❻ DIP Style:
0= Solder Type
F= Press Fit Type