



General Specifications.

General Features

- Available in type A, AB25, AB22, AB19, B25, B22, B19, C,
 L, M and N with full sets of keys
- Upper and lower shielding for the female connector.
- Three different pin length in contact area and four different length in rear mating area for the male connector
- Full series are in press-fit termination
- Inverse mating configuration
- Minimun wiping length: 2,5 mm
- Meet standard coding system(MPC) according to IEC61076-4-101
- Two rows(z and f) of male connectors are for the shielding of female connectors
- Recomended plated through hole 0,60 +-0,05 mm for the press-fiting

- Ideal for digital high speed data applications with excelent parameters for impedance match, propagation delay, cross talk, reflection
- End to end stackable
- Five signal rows plus outer rows for shieldings
- 2.00 mm Hard metric and DIN 41612 connectors can be used on the same PCB as both have the same mating distance
- Coding system prevents mix-up and wrong mating between male and female connectors
- Rear pin options (4 lengths) for through the backplane
 I/O applications
- High density capability
- Shield for EMI/RFI protection
- Expandablility for end user application

Mechanical features

- Grid size: 2.00 mm
- Air and creepage distance: Male 0,80, Female 0,60 mm.
- Contact level: Level 1 (5,30 mm); Level 2 (6,80 mm);
 Level 3 (8,30 mm)
- Mating force for signal contact:
 0,075 Kg f Maximum x contact
- Mating force for shield contatc: 0,1 Kg f Max. x contact
- Withdrawal force: 0,015 Kg f Min. per contact
- Termination: Press-fit

- Misalignment: Longitudinal +- 2,00 mm
 Latitudinal: +- 2,50 mm
- Inclination: ± 2 degree
- PCB plated through hole

Drilled hole: 0,69 to 0,72 mm diameter

Cu: 25 μ min. Sn: 5-15 μ min.

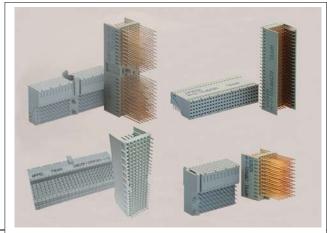
• Plated hole: 0,55 to 0,65 mm diameter

Materials

- Insulator: Glass filled Polyester UL 94 V-0
- Contact: Phosphor bronze
- U/L file E149341, Electric rating: 250V, 2A
- Operating temperature. -55°C to + 125°C
- RoHS compliant

Electrical Features

- Current rating: 1,5 A a 20 °C. 1 A at 70° C
- Contact resistance: 0,20 miliohms max.
- Insulation resistance: 104 Megohms min.
- Test voltage: 750 Vrms





Ordering and part numbers.

Ordering Information:

SERIE- T- XXX- DD- PL- L- S

1 2 3 4 5 6

1. Connector Series

2. (T) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

3. (XXX) Number of circuits

• XXX. Number of circuits (Check your serie)

4. (DD) Contact arrangement

• **DD**. Differents options available (Check your serie)

5. (PL) Pin Length

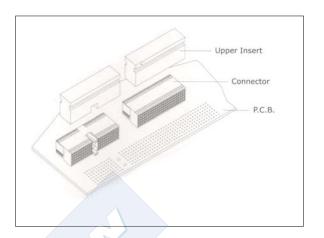
- 1A. Dim. 3.70 / 8.20 mm.
 *Check Table for all measures Options
- 6C. Dim. 16.00 / 11.20 mm.

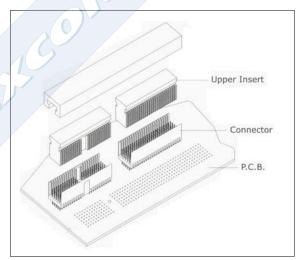
6. (L) Locating Pegs

- 0. Without pegs
- 1. With pegs

7. (S) Shielding

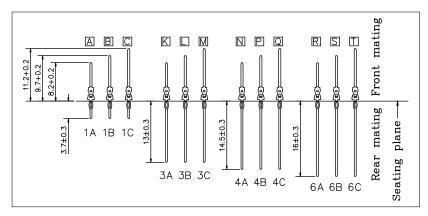
- 0. Not shielding
- 1. Shielding (Row Z and F)





CONNECTORS SERIES					
FEMALE	MALE				
A000	A001				
AB50	AB51				
AB20	AB21				
AB90	AB91				
B250	B251				
B220	B221				
B190	B191				
C000	C001				
L000	L001				
M000	M001				
N000	N001				

(PL) *Pin Lenght Options:





Ordering and part numbers.

Overview

Apfel 2.0mm HARD METRIC CONNECTOR MODULES comply with international IEC 917 and IEC 61076-4-101 standards. The connector system is designed and manufactured to meet the emerging trend of higher density and faster signal transmission in the electronic industries and ideal for application in the telecommunication, industrial PC.

All products are ROHS compliant

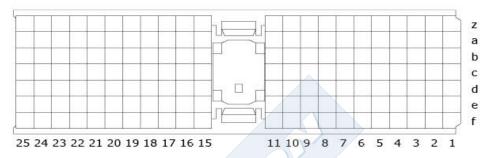
Type A Connectors	Type AB Connectors	Type B Connectors
	The state of the s	
Type C Connectors	Type L Connectors	Type M Connectors
Company of the compan	DOG OFFICE AND ADDRESS OF THE PARTY OF THE P	1982
Type N Connectors	Shrouds	Coding keys & Shielding Covers
TO COMMINISTRATION OF THE PORT		



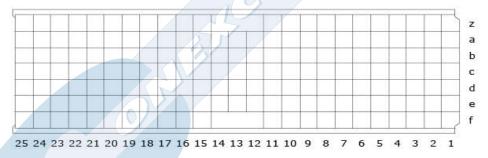
Ordering and part numbers.

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

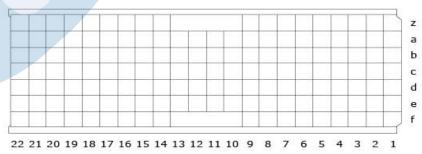
Type A Connector



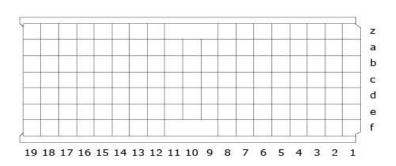
Type AB25 Connector



Type AB22 Connector



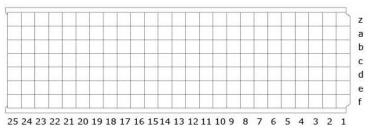
Type AB19 Connector



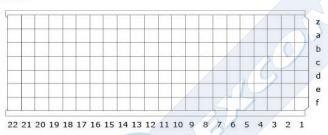


Ordering and part numbers.

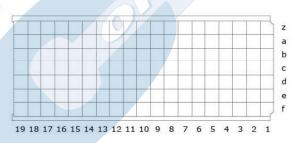
Type B25 Connector



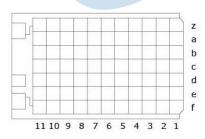
Type B22 Connector



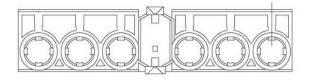
Type B19 Connector



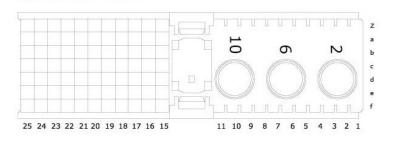
Type C Connector



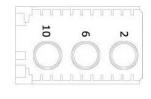
Type L Connector



Type M Connector



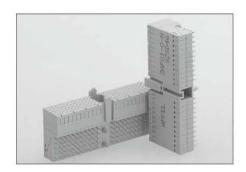
Type N Connector



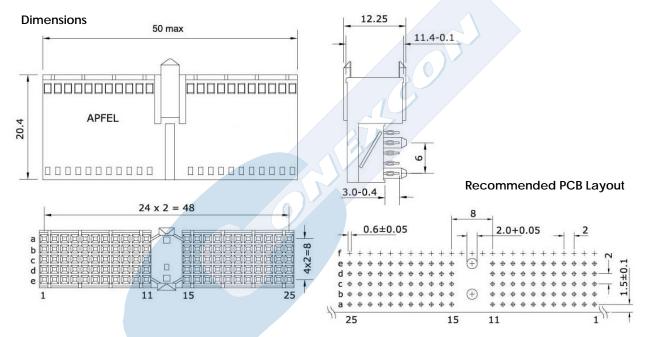


A000 SERIES. Right Angle Female Type A Connectors for Free Boards.

Product Information:



Type A right angle female connector provides 110 contacts in a 5 row X 22 position fully loaded configuration. The MPC provides alignment guide and accepts optional coding keys. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately. This connector is used in the J1 and J4 positions of the Compact PCI daughter board.



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

Ordering Information: A000- T- 110- 1- S 1 2 3 4 5 1. Connector Series 2. (T) Contact Plating T = 3. Class 3. Gold flash plating T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended) T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au (S) Shielding 0. Not shielding

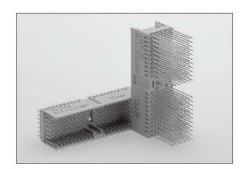
L-XX FULL LINE CATALOGUE

1. Shielding (Row Z and F)



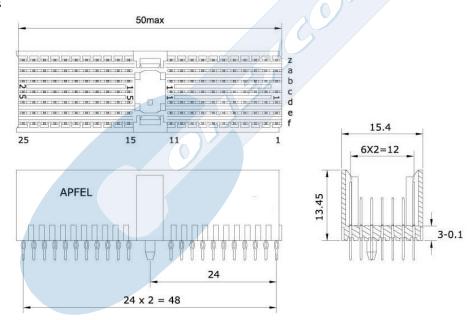
A001 SERIES. Vertical Male Type A Connectors for Fix Boards.

Product Information:

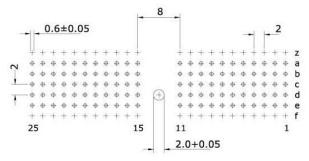


Type A Connectors provides 110 signal contacts plus optional 44 shielding contacts in 5+2 row X 22 position. The MPC(multipurpose center) provides alignment guides and accepts optional coding keys. Locating peg prevents wrong assembly and gives an accurate position.

Dimensions



Recommended PCB Layout



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



A001 SERIES. Vertical Male Type A Connectors for Fix Boards.

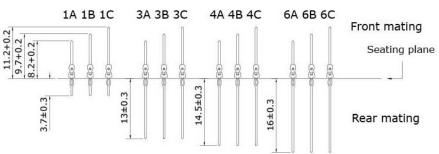
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
Z AAAAAAAAAA AAAA AAAAA AAAAA AAAAAAAAA	110	z a b c d e f	1A 1A 1A 1A 1A	A001-T*110001A00
Z Z B B B B B B B B B B B B B B B B B B	110	z a b c d e f	- 1B 1B 1B 1B 1B	A001-T*110001B00
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1A 1A 1A 1A 1A	A001-T*154001A01
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1B 1B 1B 1B 1B	A001-T*154001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options



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



A001 SERIES. Vertical Male Type A Connectors for Fix Boards.

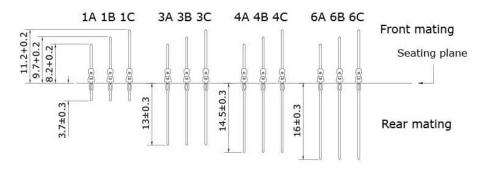
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1B 1B 1B 1B 1B 1C	A001-T*154011B01
CPCI Hot Swap CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1B * * * 1B 1C	A001-T*154021B01
CPCI Telephony Spec B B B B B B B B B B B B B B B B B B B	100	z a b c d e f	- * * * * *	A001-T*100001B01

(T) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = **4.** Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

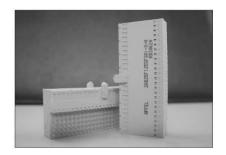


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

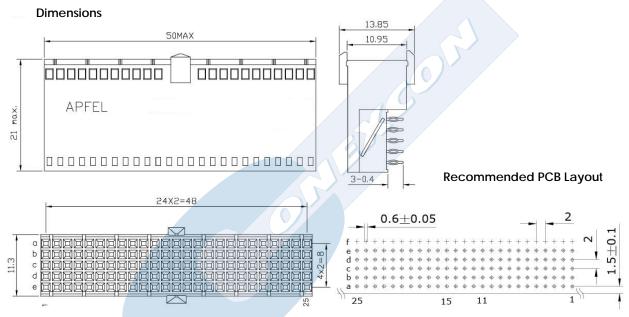


AB50 SERIES. Right Angle Female Type AB25 Connectors for Free Boards.

Product Information:



Right angle female type AB25 connector provides 125 signal contacts in a 5 row X 25 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately.



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

Ordering Information: AB50- T- 125- 0- S 1 2 3 4 5 1. Connector Series 2. (T) Contact Plating T = 3. Class 3. Gold flash plating T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended) T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au (S) Shielding 0. Not shielding 1. Shielding (Row Z and F)



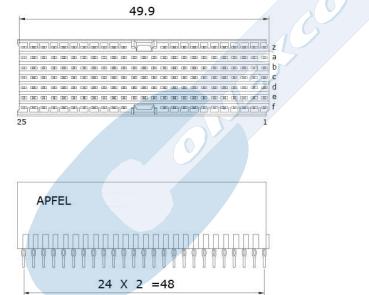
AB51 SERIES. Vertical Male Type AB25 Connectors for Fix Boards.

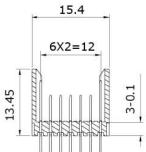
Product Information:



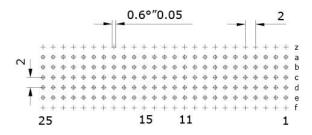
Type AB25 vertical male connector provides 125 signal contacts and optional 44 shielding contacts respectively in 5 + 2 row X 25 position configuration. All are end to end stackable without change in contact pitch.

Dimensions





Recommended PCB Layout



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



AB51 SERIES. Vertical Male Type AB25 Connectors for Fix Boards.

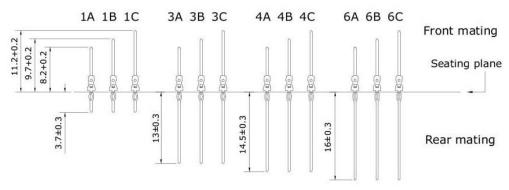
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
	125	z a b c d e f	1A 1A 1A 1A 1A	AB51-T*125001A00
	125	z a b c d e f	1B 1B 1B 1B 1B 1B	AB51-T*125001B00
	169	z a b c d e f	1C 1A 1A 1A 1A 1A	AB51-T*169001A01
CICICICICICICI	169	z a b c d e f	1C 1B 1B 1B 1B 1B	AB51-T*169001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5**. Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

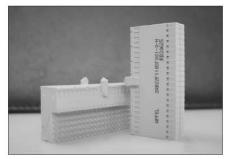


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

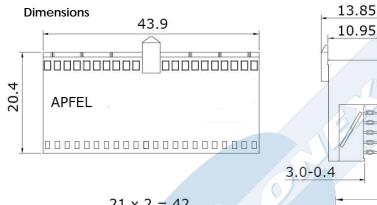


AB20 SERIES. Right Angle Female Type AB22 Connectors for Free Boards.

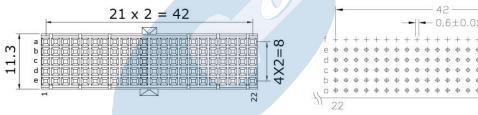
Product Information:



Right angle female type AB22 connector provides 110 signal contacts in a 5 row X 22 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately.



Recommended PCB Layout



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

Ordering Information:

<u>AB20-</u> <u>T-</u> <u>110-</u> <u>0-</u> <u>S</u>

- 1. Connector Series
- 2. (T) Contact Plating
- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au
- 5. (S) Shielding
- 0. Not shielding
- 1. Shielding (Row Z and F)



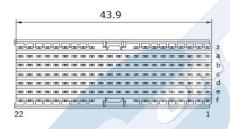
AB21SERIES. Vertical Male Type AB22 Connectors for Fix Boards.

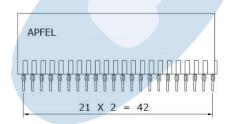
Product Information:

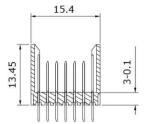


Type AB22 vertical male connector provides 110 signal contacts and optional 36 shielding contacts respectively in 5 + 2 row X 22 position configuration. All are end to end stackable without change in contact pitch.

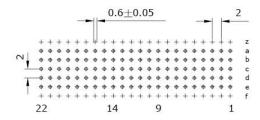
Dimensions







Recommended PCB Layout



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



AB21SERIES. Vertical Male Type AB19 Connectors for Fix Boards.

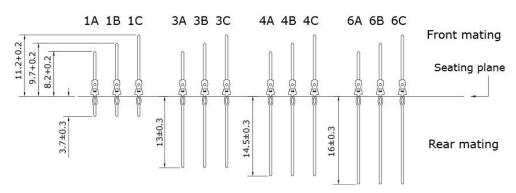
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
	95	z a b c d e f	1A 1A 1A 1A 1A	AB21-T*095001A00
2 B B B B B B B B B B B B B B B B B B B	95	z a b c d e f	1B 1B 1B 1B 1B	AB21-T*095001B00
CHCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	127	z a b c d e f	1C 1A 1A 1A 1A 1A	AB21-T*127001A01
	127	z a b c d e f	1C 1B 1B 1B 1B 1B	AB21-T*127001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5.** Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

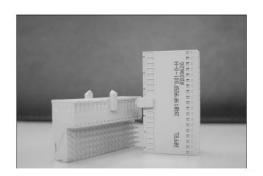


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

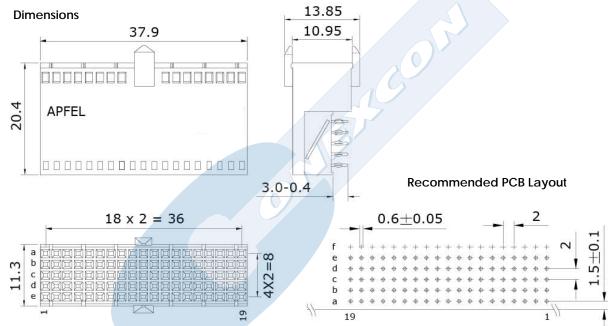


AB90 SERIES. Right Angle Female Type AB19 Connectors for Free Boards.

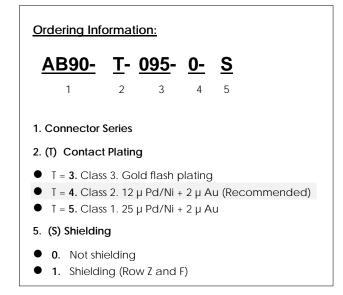
Product Information:



Right angle female type AB19 connector provides 95 signal contacts in a 5 row X 19 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately.



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





AB91SERIES. Vertical Male Type AB19 Connectors for Fix Boards.

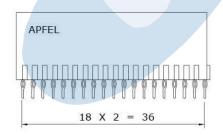
Product Information:

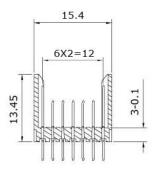


Type AB19 vertical male connector provides 95 signal contacts and optional 32 shielding contacts respectively in 5 + 2 row X 19 position configuration. All are end to end stackable without change in contact pitch.

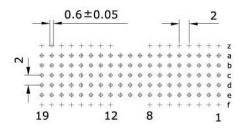
Dimensions







Recommended PCB Layout



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



AB91SERIES. Vertical Male Type AB19 Connectors for Fix Boards.

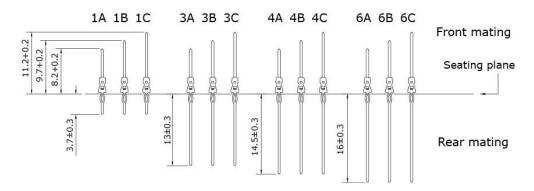
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
	95	z a b c d e f	1A 1A 1A 1A 1A	AB91-T*095001A00
19 18 17 16 15 16 15 16 13 12 18 7 6 5 4 3 2 1 1 1 1 1 1 1 1 1	95	z a b c d e f	1B 1B 1B 1B 1B	AB91-T*095001B00
CHCHCHCHC	127	z a b c d e f	1C 1A 1A 1A 1A 1A 1C	AB91-T*127001A01
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	127	z a b c d e f	1C 1B 1B 1B 1B 1B	AB21-T*127001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5.** Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

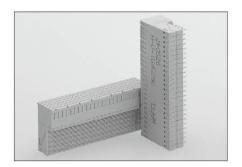


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.



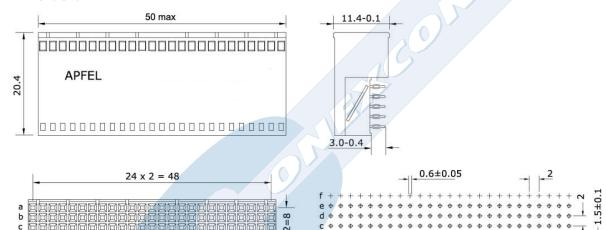
B250 SERIES. Right Angle Female Type B25 Connectors for Free Boards.

Product Information:

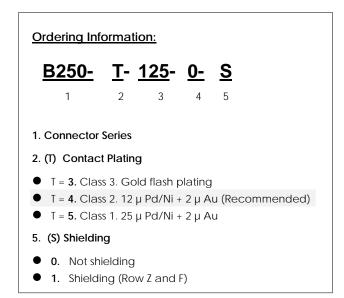


Right angle female type B25 connector provides 125 signal contacts in a 5 row X 25 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately.

Dimensions



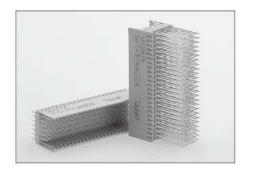
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.





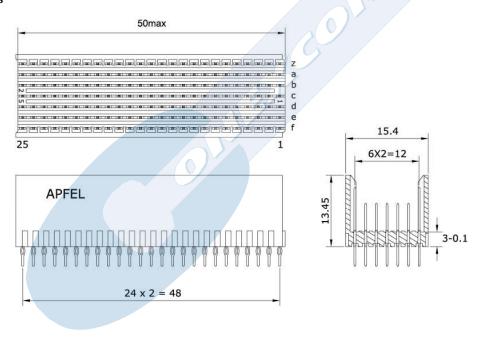
B251 SERIES. Vertical Male Type B25 Connectors for Fix Boards.

Product Information:

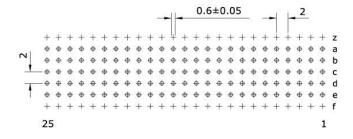


Type B25 vertical male connector provides 125 signal contacts and optional 50 shielding contacts respectively in 5 + 2 row X 25 position configuration. All are end to end stackable without change in contact pitch.

Dimensions



Recommended PCB Layout



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



B251 SERIES. Vertical Male Type B25 Connectors for Fix Boards.

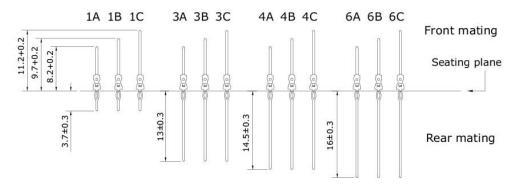
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
Z Z A A A A A A A A A A A A A A A A A A	125	z a b c d e f	1A 1A 1A 1A 1A	B251-T*125001A00
Z B B B B B B B B B B B B B B B B B B B	125	z a b c d e f	1B 1B 1B 1B 1B	B251-T*125001B00
CICICICICICICICICICICICICICICICICICICI	175	z a b c d e f	1C 1A 1A 1A 1A 1A 1C	B251-T*175001A01
CICLCICICICICICICICICICICICICICICICICIC	175	z a b c d e f	1C 1B 1B 1B 1B 1B	B251-T*175001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = **4.** Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

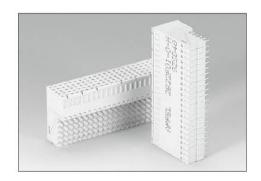


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

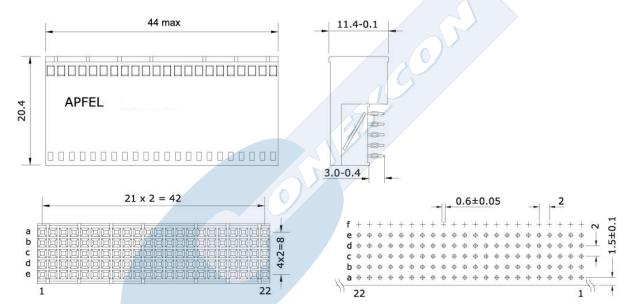


B220 SERIES. Right Angle Female Type B22 Connectors for Free Boards.

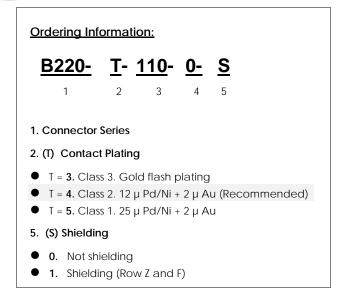
Product Information:



Right angle female type B22 connector provides 110 signal contacts in a 5 row X 22 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately. The 22 position one is used in the J2 and J5 location of the Compact PCI daughter card.



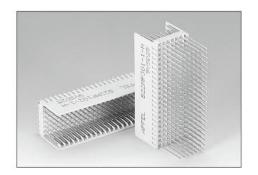
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.





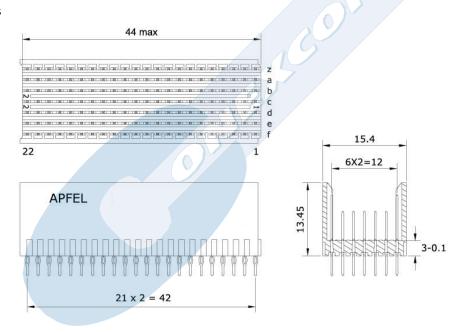
B221 SERIES. Vertical Male Type B22 Connectors for Fix Boards.

Product Information:

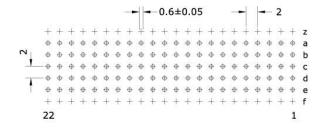


Type B22 vertical male connector provides 110 signal contacts and optional 44 shielding contacts respectively in 5 + 2 row X 22 position configuration. All are end to end stackable without change in contact pitch.

Dimensions



Recommended PCB Layout



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



B221 SERIES. Vertical Male Type B22 Connectors for Fix Boards.

Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
Z AAAAAAAAAAAAAAAA AAAAAAAAA AAAAAAAAAA	110	z a b c d e f	1A 1A 1A 1A 1A	B221-T*110001A00
Z B B B B B B B B B B B B B B B B B B B	110	z a b c d e f	1B 1B 1B 1B 1B 1B	B221-T*110001B00
CICICICICICICICICICICICICICICICICICICI	154	z a b c d e f	1C 1A 1A 1A 1A 1A	B221-T*154001A01
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1B 1B 1B 1B 1B	B221-T*154001B01
CPCI Telephony Spec CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	154	z a b c d e f	1C 1A/1B 1A/1B 1A/1B 1A/1B 1A/1B	B221-T*154011A01

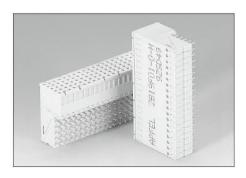
(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5.** Class 1. 25 μ Pd/Ni + 2 μ Au



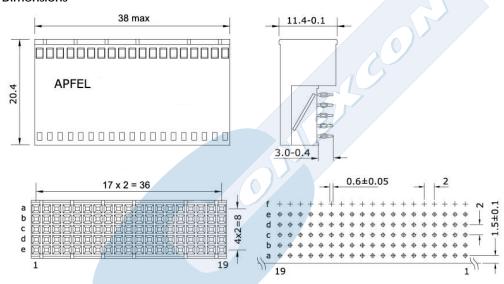
B190 SERIES. Right Angle Female Type B19 Connectors for Free Boards .

Product Information:

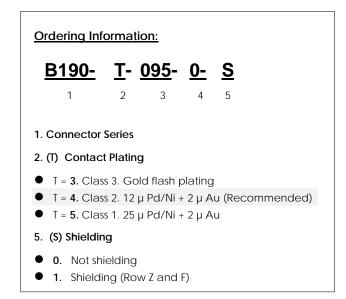


Right angle female type B19 connector provides 95 signal contacts in a 5 row X 19 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately. The 19 position one is used in the J3 location of the compact PCI daughter card.

Dimensions



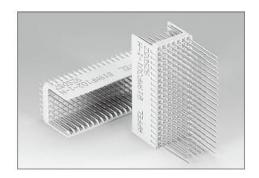
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.





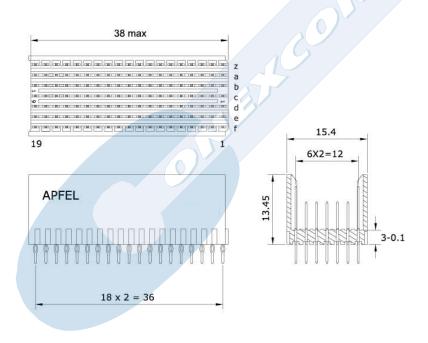
B191 SERIES. Vertical Male Type B19 Connectors for Fix Boards.

Product Information:

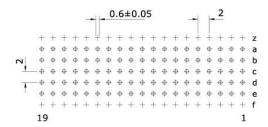


Type B19 vertical male connector provides 95 signal contacts and optional 38 shielding contacts respectively in 5 + 2 row X 19 position configuration. All are end to end stackable without change in contact pitch.

Dimensions



Recommended PCB Layout



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



B191 SERIES. Vertical Male Type B22 Connectors for Fix Boards.

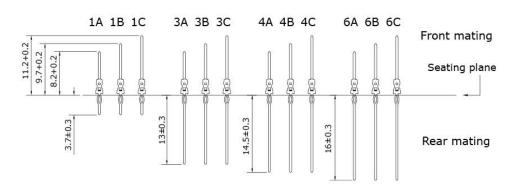
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
CPCI Telephony Spec AAAAAAAAAAAAAAAA AAAAAAAAAAAAAA AAAA	95	z a b c d e f	1A 1A 1A 1A 1A	B191-T*095001A00
Z B B B B B B B B B B B B B B B B B B B	95	z a b c d e f	1B 1B 1B 1B 1B	B191-T*095001B00
CICICICICICICICICICICICICICICICICICICI	133	z a b c d e f	1C 1A 1A 1A 1A 1A 1C	B191-T*133001A01
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	133	z a b c d e f	1C 1B 1B 1B 1B 1B 1C	B191-T*133001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5**. Class 1. 25 μ Pd/Ni + 2 μ Au

Male Contact Options

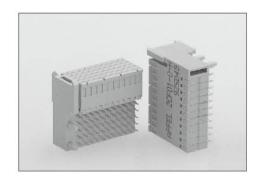


Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.



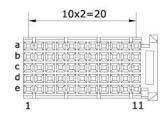
COOO SERIES. Right Angle Female Type C Connectors for Free Boards.

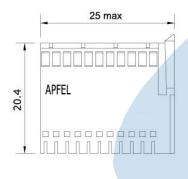
Product Information:

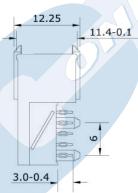


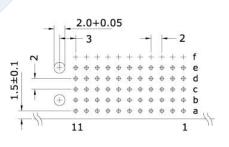
Right angle female half-size type C connector is polarized and provides 55 signal contacts in a 5 row X 11 position fully loaded configuration. Optional pre-assembled upper ground return shield is also provided or can be ordered separately. The lower ground return shield can be ordered separately.

Dimensions









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

Ordering Information:

<u>C000-</u> <u>T- 055- 1-</u> <u>S</u>

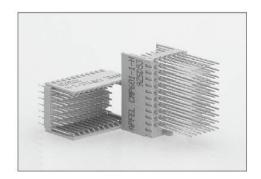
1 2 3 4

- 1. Connector Series
- 2. (T) Contact Plating
- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au
- 5. (S) Shielding
- 0. Not shielding
- 1. Shielding (Row Z and F)



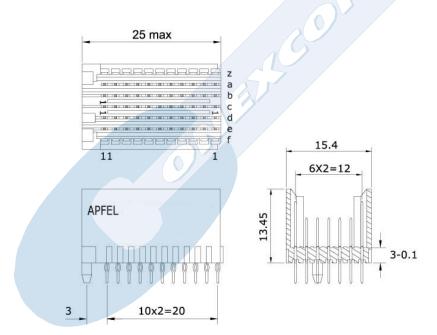
CO01 SERIES. Vertical Male Type C Connectors for Fix Boards.

Product Information:

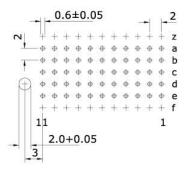


Type C vertical male connector provides 55 signal contacts and optional 22 shielding contacts respectively in 5 + 2 row X 11 position. This half-size connector is polarized and provides alignment of the mating connectors.

Dimensions



Recommended PCB Layout



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



CO01 SERIES. Vertical Male Type C Connectors for Fix Boards.

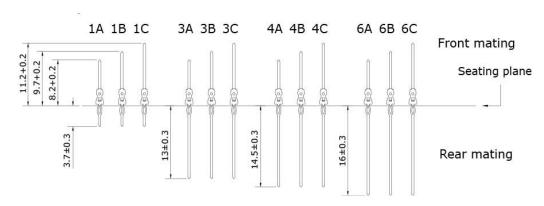
Product Information:

Assembly Drawing	Total Number	Row	Туре	Part Numbers
z AAAAAAAAAA A AAAA AAAAAAAA AAAAAAAA AAAAAA	55	z a b c d e f	1A 1A 1A 1A 1A	C001-T*055001A00
z BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	55	z a b c d e f	1B 1B 1B 1B 1B 1B	C001-T*055001B00
CCCCCCCCCC z AAAAAAAA a AAAAAAAA b AAAAAAAAA c AAAAAAAAA d AAAAAAAA c AAAAAAAAA c AAAAAAAAA f CCCCCCCCCCCCCCCCCCCCCCCCCCC	77	z a b c d e f	1C 1A 1A 1A 1A 1A 1C	C001-T*077001A01
CCCCCCCCCC z B B B B B B B B B B B B B B B B B B B	77	z a b c d e f	1C 1B 1B 1B 1B 1B 1C	C001-T*077001B01

(T*) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

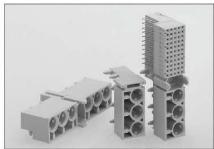
Male Contact Options



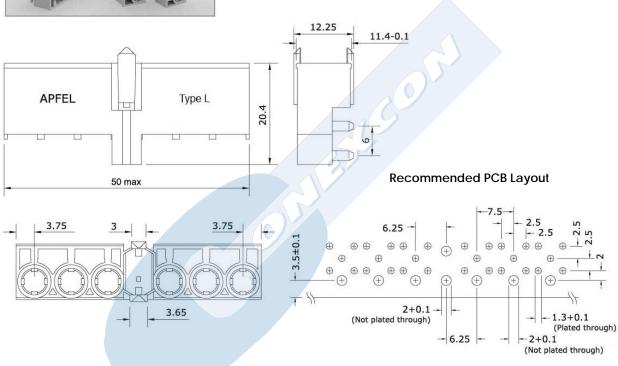


LOOO SERIES. Right Angle Female Type L/M/N Connectors for Free Boards .

Product Information:



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



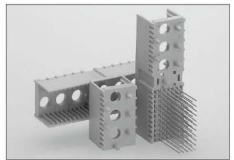
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Ordering Information: L000- T- 006- 1- 1- S 1 2 3 4 5 1. Connector Series 2. (T) Contact Plating • T = 3. Class 3. Gold flash plating • T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended) • T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au 5. (S) Shielding • 0. Not shielding • 1. Shielding (Row Z and F)

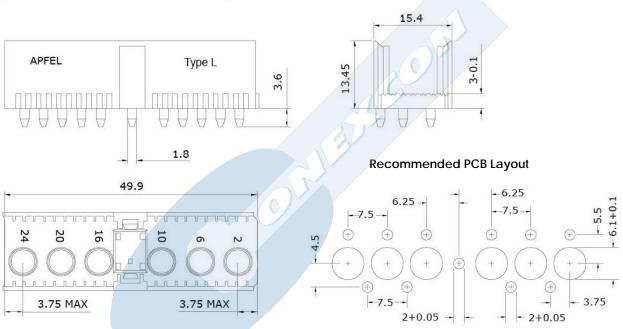


LO01 SERIES. Vertical Male Type L/M/N Connectors for Fix Boards.

Product Information:



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



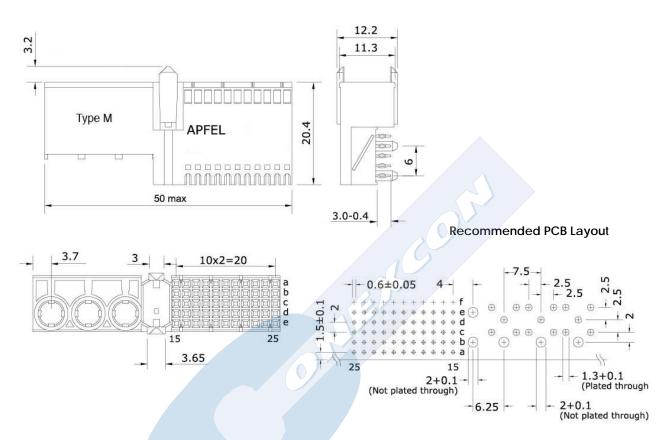
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

Ordering Information: L001 T 006 1 1 S 1 2 3 4 5 1. Connector Series 2. (Γ) Contact Plating • T = 3. Class 3. Gold flash plating • T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended) • T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au 5. (S) Shielding • 0. Not shielding • 1. Shielding (Row Z and F)



MOOO SERIES. Right Angle Female Type M Connectors for Free Boards.

Product Information:



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

Ordering Information:

<u>M000-</u> <u>T- 058- 1- 1- S</u>

Connector Series
 (T) Contact Plating

• T = 3. Class 3. Gold flash plating

• T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)

• T = **5**. Class 1. 25 μ Pd/Ni + 2 μ Au

5. (S) Shielding

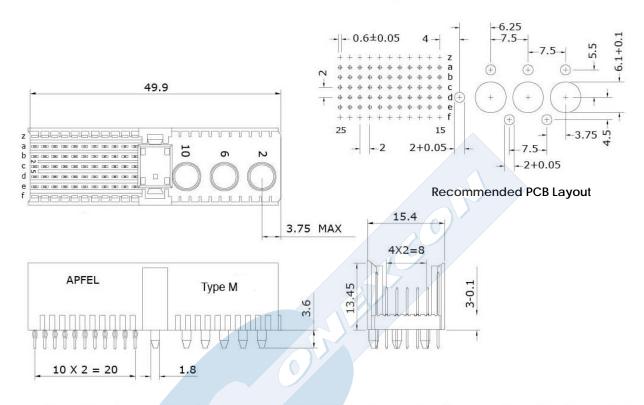
• 0. Not shielding

• 1. Shielding (Row Z and F)



MOO1 SERIES. Vertical Male Type M Connectors for Fix Boards.

Product Information:



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

Ordering Information:

M001- T- 058- 1- 1- S

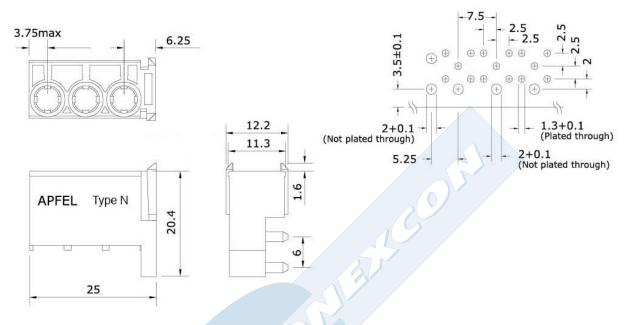
- 1. Connector Series
- 2. (T) Contact Plating
- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5.** Class 1. 25 μ Pd/Ni + 2 μ Au
- 5. (S) Shielding
- 0. Not shielding
- 1. Shielding (Row Z and F)



NOOO SERIES. Vertical Male Type N Connectors for Fix Boards.

Product Information:

Recommended PCB Layout



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

Ordering Information:

<u>N000-</u> <u>T- 003- 1- 1- S</u>

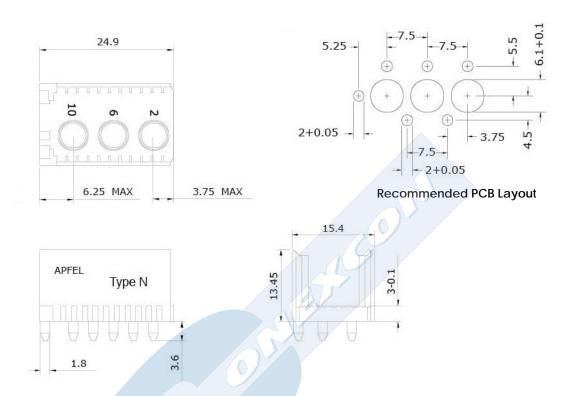
1 2 3 4 !

- 1. Connector Series
- 2. (T) Contact Plating
- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = **5**. Class 1. 25 μ Pd/Ni + 2 μ Au
- 5. (S) Shielding
- 0. Not shielding
- 1. Shielding (Row Z and F)

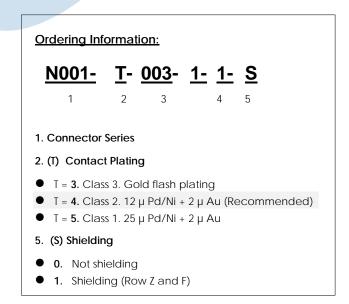


NOO1 SERIES. Vertical Male Type N Connectors for Fix Boards.

Product Information:



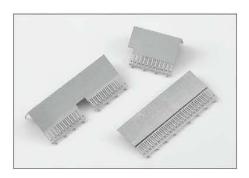
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specifie





2305 SERIES. Shielding Covers.

Product Information:



Upper ground return shield could be pre-installed to the female connectors, the lower shield is provided and assembled separately after installing of the connector onto the printed circuit board as required. Both the upper and lower shielding covers could be also ordered separately.

Ordering Information:

2305- T- XXXX- 1- P

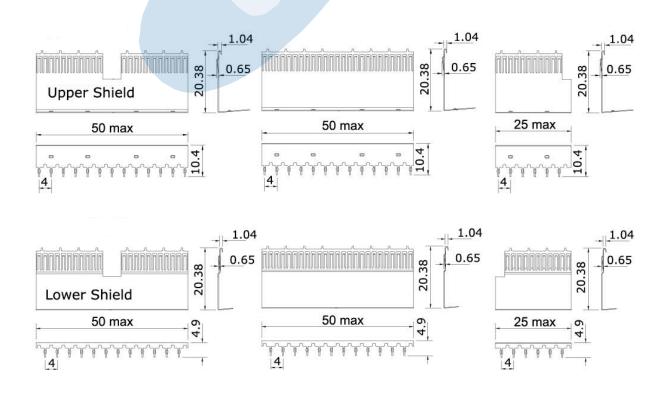
1 2 3

Connector Series (T) Contact Plating

- T = 3. Class 3. Gold flash plating
- T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)
- T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au

3. (XXXX) Connector Type

- XXXX = A000. (Connector Type A)
- XXXX = AB25. (Connector Type AB25)
- XXXX = AB22. (Connector Type AB22)
- XXXX = AB19. (Connector Type AB19)
- XXXX = **B025**. (Connector Type B25)
- XXXX = B022. (Connector Type B22)
- XXXX = B019. (Connector Type B19)XXXX = C000. (Connector Type C)
- 4. (P) Shielded Options
- P = 1. Upper shielded
- P = 2. Lower shielded





2306 SERIES. Coding Keys.

Coding Keys:

Coding keys are snapped into both male and female of MPC (Mutipurpose Center) in the Type A, L and M connectors to prevent damage to the system resulted from incorrect insertion of cards. Only connector pairs equipped matching coding keys are intermateable. The unique color of the coding pairs provides easy visual identification of the correct mating connectors.

Ordering Information

Codeing Key	Code Number	Color	Part Number	Codeing Key	Code Number	Color	Part Number
8 6 5	3568	Pastel orange	2306-3568	124	1247	Pastel orange	2306-1247
43	3478	Steel Blue	2306-3478	(1 2 (5 6	1256	Steel Blue	2306-1256
43	3467	Slate grey	2306-3467	1 2 5 8	1258	Slate grey	2306-1258
43	3456	Cadmium yellow	2306-3456	7 8	1278	Cadmium yellow	2306-1278
8 7 5	2578	Reseda green	2306-2578	1 3 4	1346	Reseda green	2306-1346
765	1567	Brilliant blue	2306-1567	2 3 4	2348	Brilliant blue	2306-2348
3 1 6 5	1356	Blue lilac	2306-1356	7 8	2478	Blue lilac	2306-2478
876	4678	Ochre yellow	2306-4678	123	1235	Ochre yellow	2306-1235
4 2 1 8	1248	Strawberry red	2306-1248	5 6 7	3567	Strawberry red	2306-3567
3 2 1	1236	Nut brown	2306-1236	5 7.8	4578	Nut brown	2306-4578

The color/code number combinations listed above follows IEC61076-4-101 recommendation. Consult factory for other versions.