



### **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
- Recommended plated through hole 0,60 +-0,05 mm for the press-fiting

#### 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

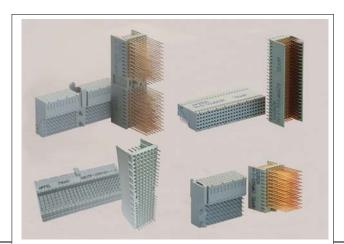
#### Materials

- 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

- 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
- 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

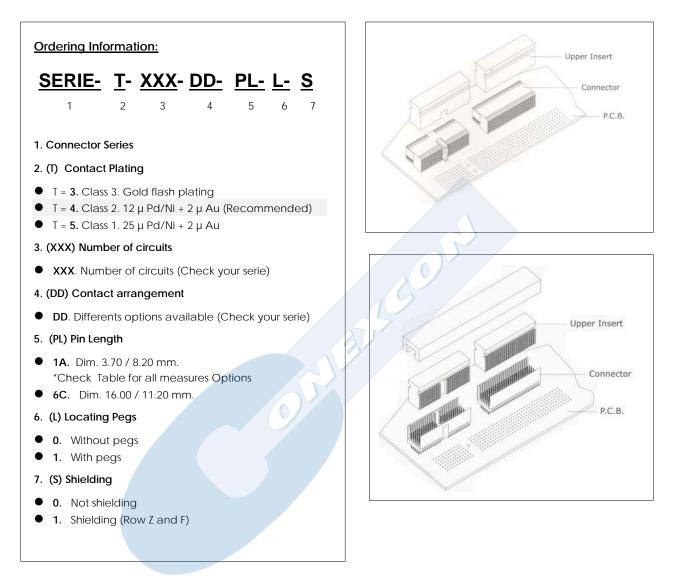
#### **Electrical Features**

- 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



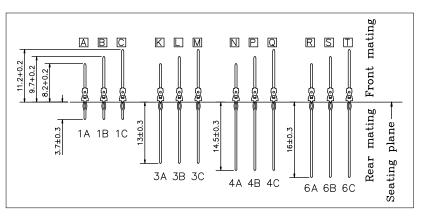


#### Ordering and part numbers.



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

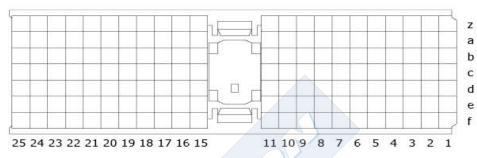
Type A Connectors	Type AB Connectors	Type B Connectors
	A CONTRACTOR OF	A CONTRACT CARD
Type C Connectors	Type L Connectors	Type M Connectors
Type N Connectors	Shrouds	Coding keys & Shielding Covers
A DOOD		



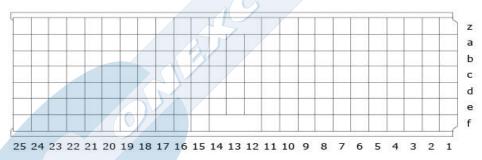
### Ordering and part numbers.

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

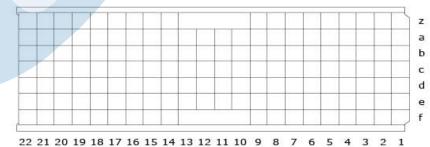
### Type A Connector



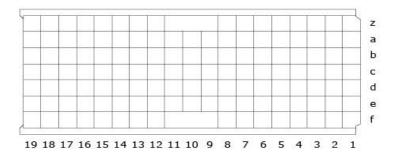
### **Type AB25 Connector**



### **Type AB22 Connector**

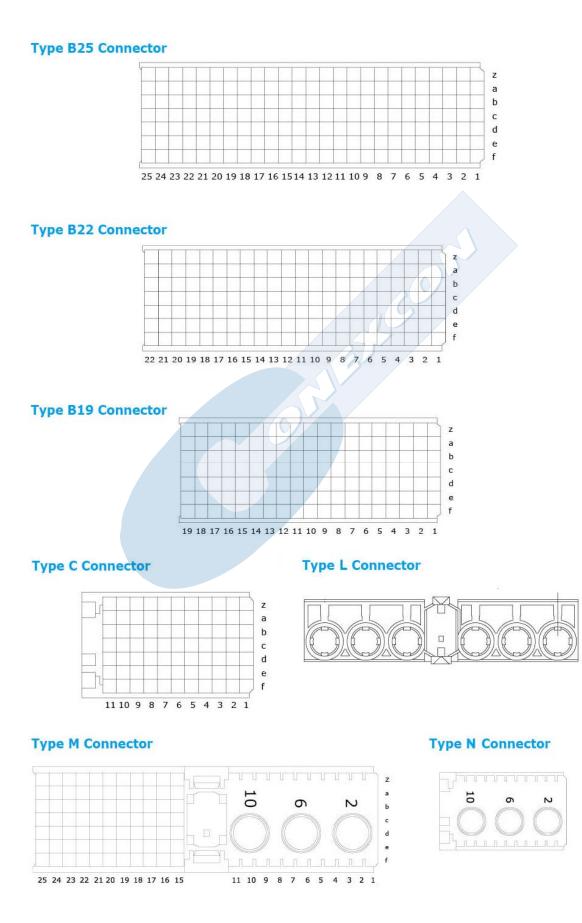


### **Type AB19 Connector**





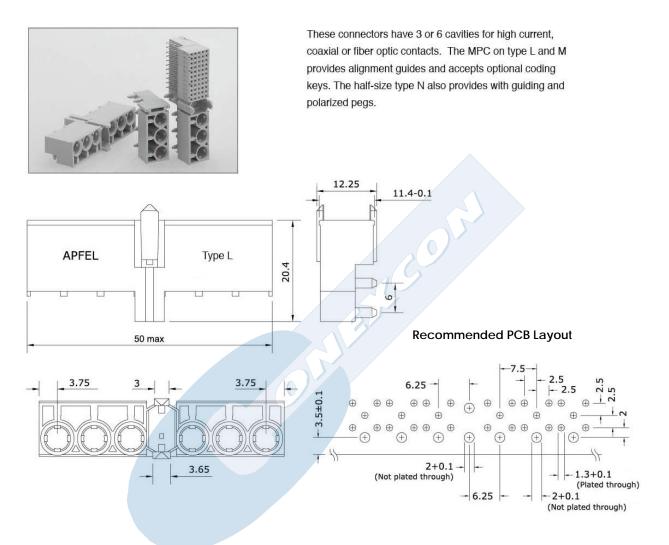
## Ordering and part numbers.





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

Product Information:



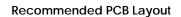
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.

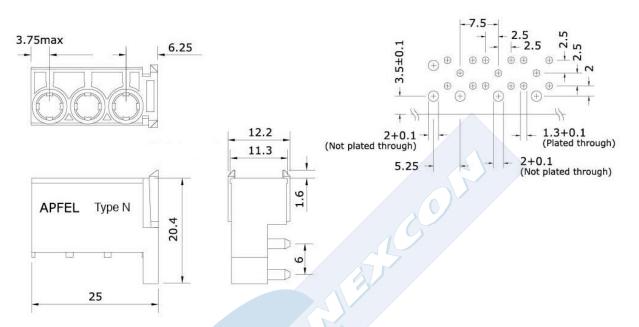
Ordering Information:
<u>L000- T- 006- 1- 1- S</u>
1 2 3 4 5
1. Connector Series 2. (T) Contact Plating
<ul> <li>T = 3. Class 3. Gold flash plating</li> </ul>
<ul> <li>T = 4. Class 2. 12 μ Pd/Ni + 2 μ Au (Recommended)</li> <li>T = 5. Class 1. 25 μ Pd/Ni + 2 μ Au</li> </ul>
5. (S) Shielding
<ul><li>0.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



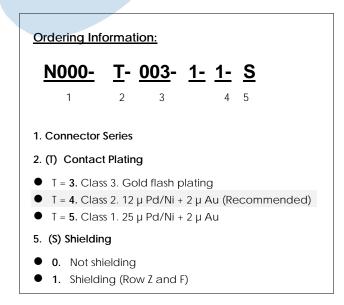
## **NOOO SERIES.** Vertical Male Type N Connectors for Fix Boards.

#### Product Information:





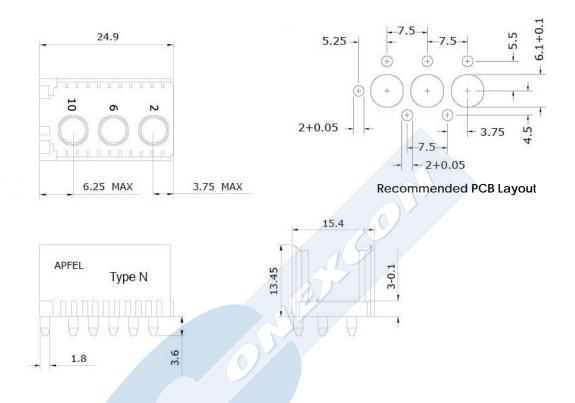
Dimensions shown are for reference purpose only. All dimensions are in millimeters unless otherwise specified.





## **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

Ordering Information:
<u>N001-</u> <u>T</u> - <u>003</u> - <u>1-</u> <u>1-</u> <u>S</u>
1 2 3 4 5
1. Connector Series
2. (T) Contact Plating
• T = 3. Class 3. Gold flash plating
• $T = 4$ . Class 2. 12 $\mu$ Pd/Ni + 2 $\mu$ 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)