

3M™ Pak 50 I/O Plug

.050" Straight and Right Angle, Through-Hole, Boardmount

P50 Series



- P50 Plug offers straight and right angle through-hole options
- Right angle P50 Plug comes with and without retention clips
- Latch/eject mechanism maintains a secure connection
- Mates to the P50 wiremount socket
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS Compliance" section of www.3Mconnector.com for compliance information (RIA E1 and C1 apply)

Date Modified: February 4, 2010

TS-1162-B
Sheet 1 of 3

Physical

Insulator:

Material: Glass Filled Nylon

Flammability: UL 94V-0

Color: Black

Contact Material: Phosphor Bronze

Plating:

Underplating: Nickel

Wiping Area: 10 μ " [0.25 μ m] Gold

Solder Tails: Gold Flash

Retaining Clips: Tin-Copper

Mating Compatibility: TS-2047

Electrical

Current Rating: 0.5 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at 500 V_{DC}

Withstanding Voltage: 650 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Process Rating: 260°C Wave Solder Compatible

UL File No.: E68080



Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Pak 50 I/O Plug

.050" Straight and Right Angle, Through-Hole, Boardmount

P50 Series

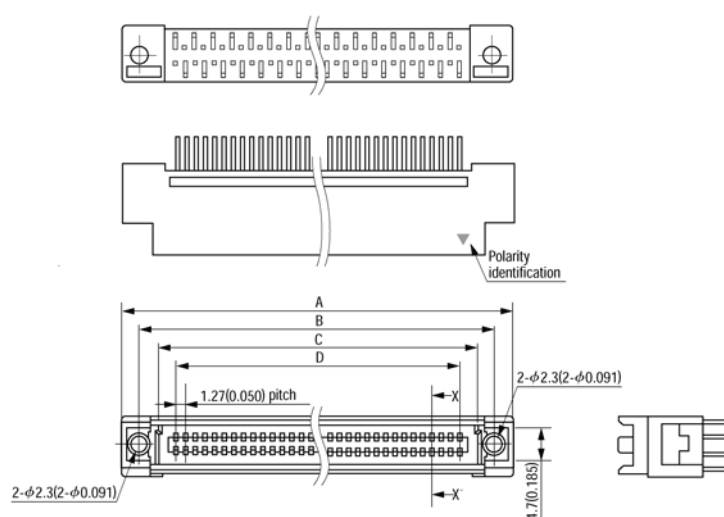


Product Table / Dimensions for Straight and Right Angle Plug

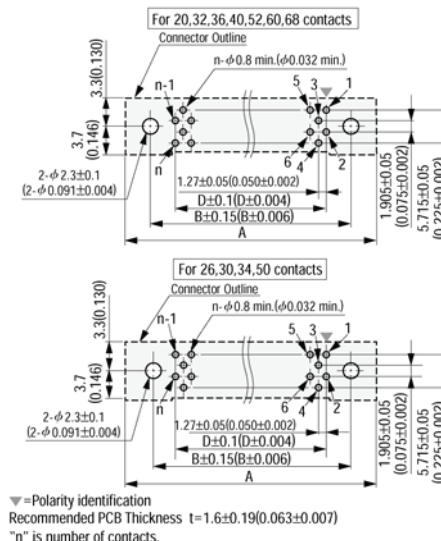
Contact Quantity	A	B	C	D
20	25.43 [1.001]	20.32 [0.800]	15.83 [0.623]	11.43 [0.450]
26	29.24 [1.151]	24.13 [0.950]	19.64 [0.773]	15.24 [0.600]
30	31.78 [1.251]	26.67 [1.050]	22.18 [0.873]	17.78 [0.700]
32	33.05 [1.301]	27.94 [1.100]	23.45 [0.923]	19.05 [0.750]
34	34.32 [1.351]	29.21 [1.150]	24.72 [0.973]	20.32 [0.800]

Contact Quantity	A	B	C	D
40	38.13 [1.501]	33.02 [1.300]	28.53 [1.123]	24.13 [0.950]
50	44.48 [1.751]	39.37 [1.550]	34.88 [1.373]	30.48 [1.200]
52	45.75 [1.801]	40.64 [1.600]	36.15 [1.423]	31.75 [1.250]
60	50.83 [2.001]	45.72 [1.800]	41.23 [1.623]	36.83 [1.450]
68	55.91 [2.201]	50.80 [2.000]	46.31 [1.823]	41.91 [1.650]

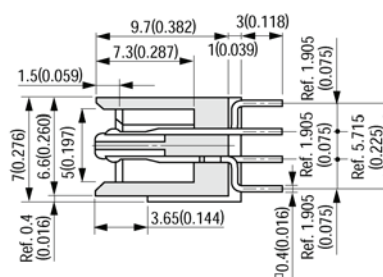
Straight Plug



Printed Circuit Board Layout
(Component Side View)



X-X' Cross Section



Ordering Information

P50 - XXXP1 - XXX - EA

Contact Quantity:
See Table

S1 = Straight tails, without Retention Clips
SR1 = Right Angle tails, without Retention Clips
RR1 = Right Angle tails, with Retention Clips

TS-1162-B
Sheet 2 of 3



Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Pak 50 I/O Plug

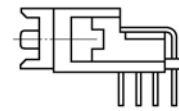
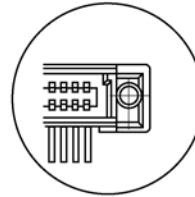
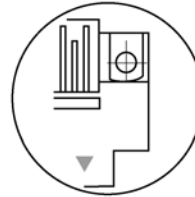
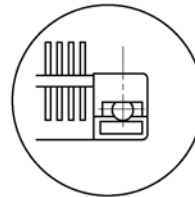
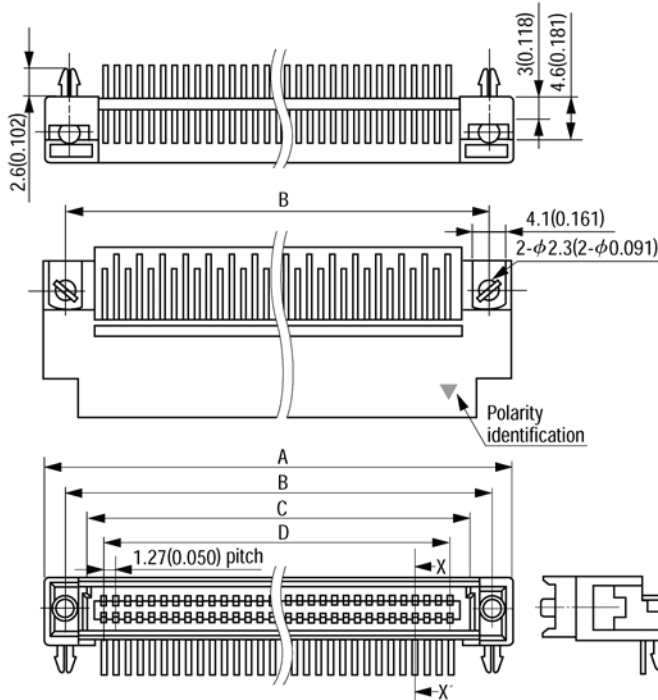
.050" Straight and Right Angle, Through-Hole, Boardmount

P50 Series

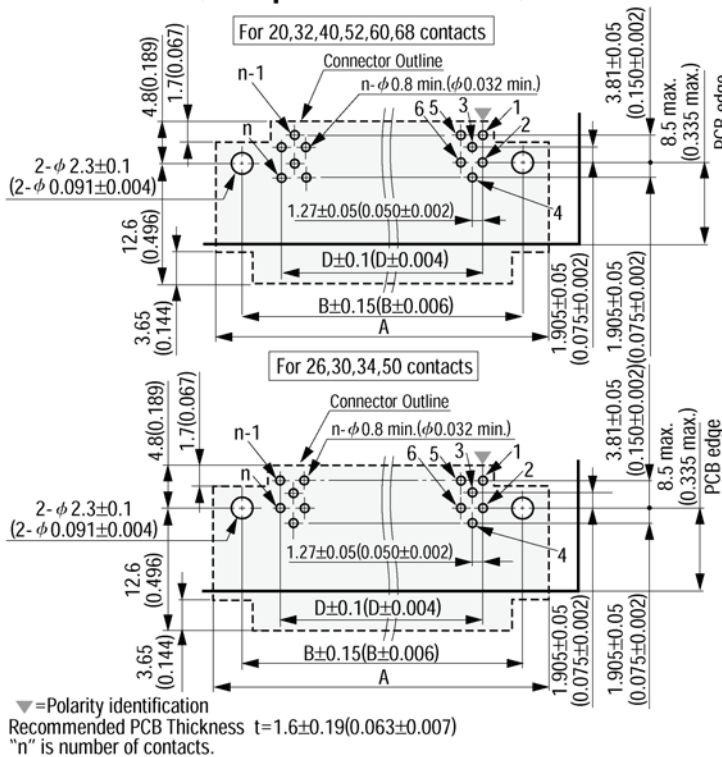


Right Angle Plug with Retention Clips

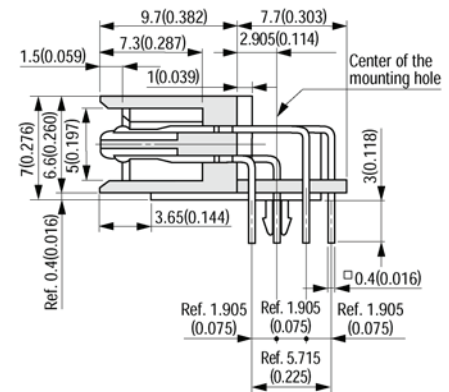
Right Angle Plug without Retention Clips



Printed Circuit Board Layout
(Component Side View)



X-X' Cross Section



TS-1162-B
Sheet 3 of 3



Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



3M Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnector.com

Please recycle. Printed in USA.
© 3M 2010. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

[P50-030P1-RR1-EA](#) [P50-050P1-SR1-EA](#) [P50-050P1-S1-EA](#) [P50-020P1-RR1-EA](#) [P50-060P1-S1-EA](#) [P50-020P1-SR1-EA](#) [P50-030P1-SR1-EA](#) [P50-052P1-S1-EA](#)