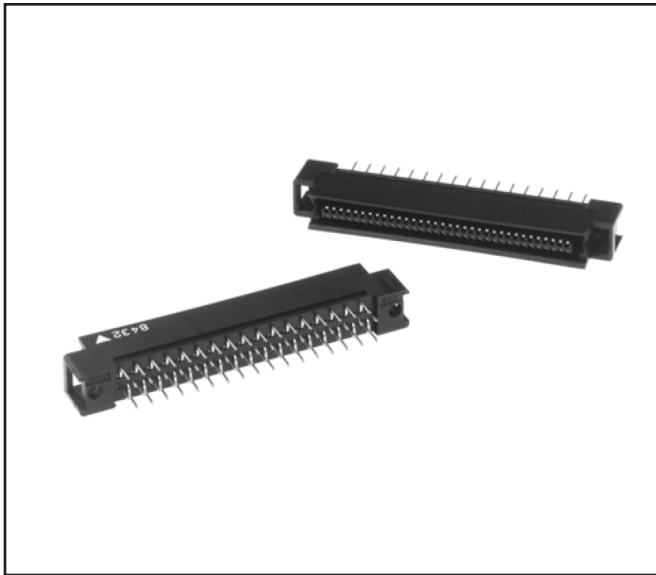


# 3M™ Pak 50 I/O Plug

.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](http://www.3Mconnector.com) for compliance information (RIA E1 and C1 apply)

Date Modified: February 4, 2010

TS-1162-B  
Sheet 1 of 3

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## Physical

### Insulator:

Material: Glass Filled Nylon

Flammability: UL 94V-0

Color: Black

Contact Material: Phosphor Bronze

### Plating:

Underplating: Nickel

Wiping Area: 10  $\mu$ " [ 0.25  $\mu$ m ] Gold

Solder Tails: Gold Flash

Retaining Clips: Tin-Copper

Mating Compatibility: TS-2047

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## Electrical

**Current Rating:** 0.5 A

**Insulation Resistance:**  $> 1 \times 10^9 \Omega$  at 500 V<sub>DC</sub>

**Withstanding Voltage:** 650 V<sub>AC</sub> for 1 minute

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## Environmental

**Temperature Rating:** -55°C to +85°C

**Process Rating:** 260°C Wave Solder Compatible

UL File No.: E68080

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# 3M™ Pak 50 I/O Plug

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

P50 Series

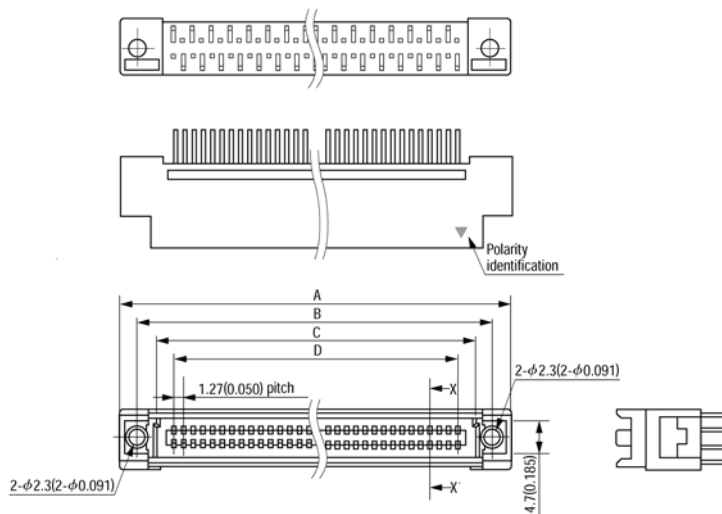


## Product Table / Dimensions for Straight and Right Angle Plug

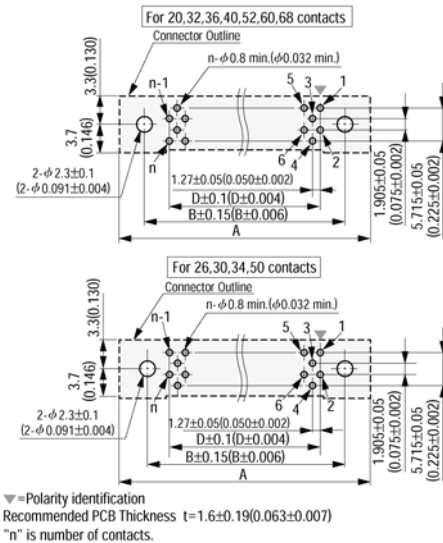
Contact Quantity	A	B	C	D
20	25.43 [1.001]	20.32 [0.800]	15.83 [0.623]	11.43 [0.450]
26	29.24 [1.151]	24.13 [0.950]	19.64 [0.773]	15.24 [0.600]
30	31.78 [1.251]	26.67 [1.050]	22.18 [0.873]	17.78 [0.700]
32	33.05 [1.301]	27.94 [1.100]	23.45 [0.923]	19.05 [0.750]
34	34.32 [1.351]	29.21 [1.150]	24.72 [0.973]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

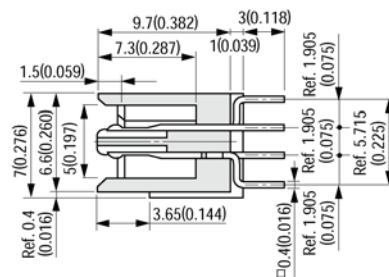
### Straight Plug



### 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

# 3M™ Pak 50 I/O Plug

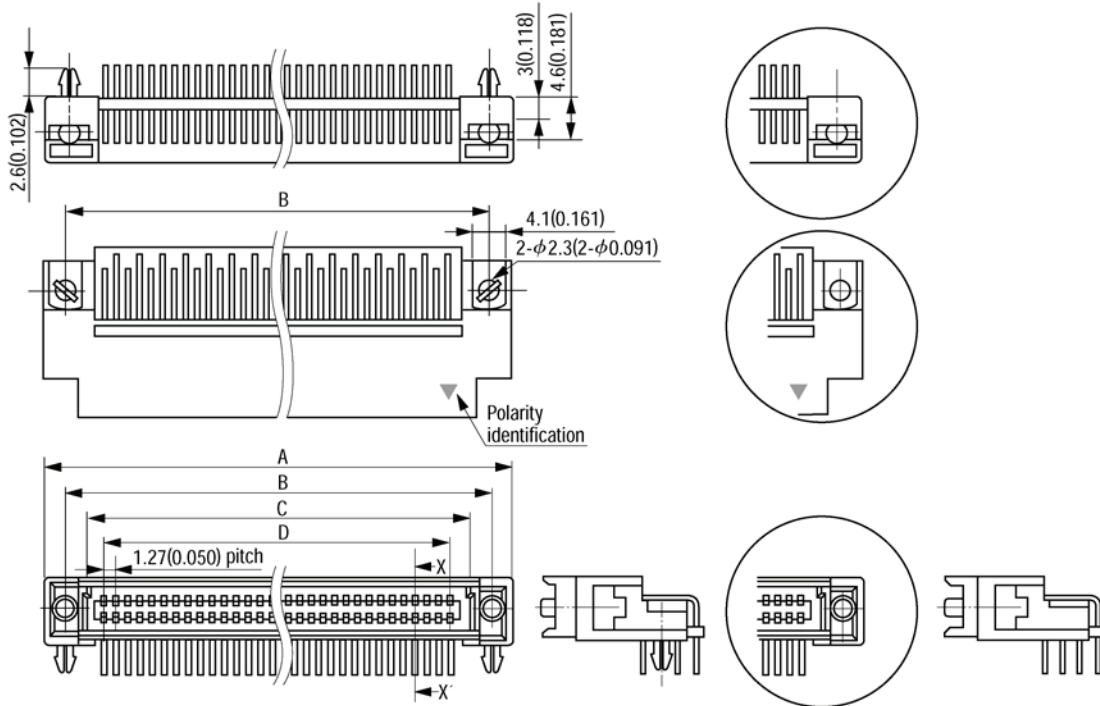
.050" Straight and Right Angle, Through-Hole, Boardmount

P50 Series

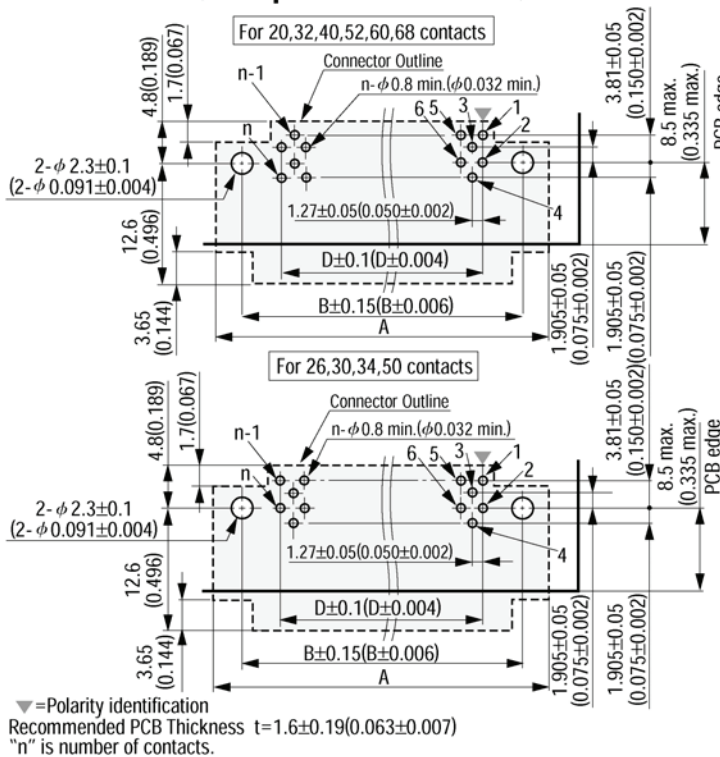


Right Angle Plug with Retention Clips

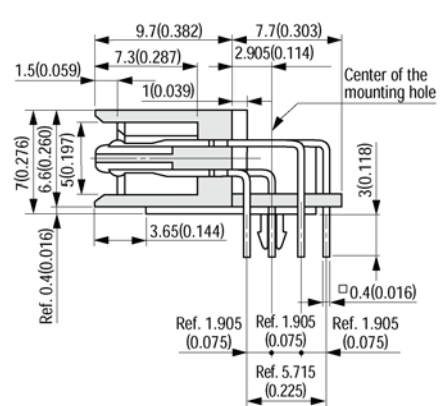
Right Angle Plug without Retention Clips



Printed Circuit Board Layout  
(Component Side View)



X-X' Cross Section



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