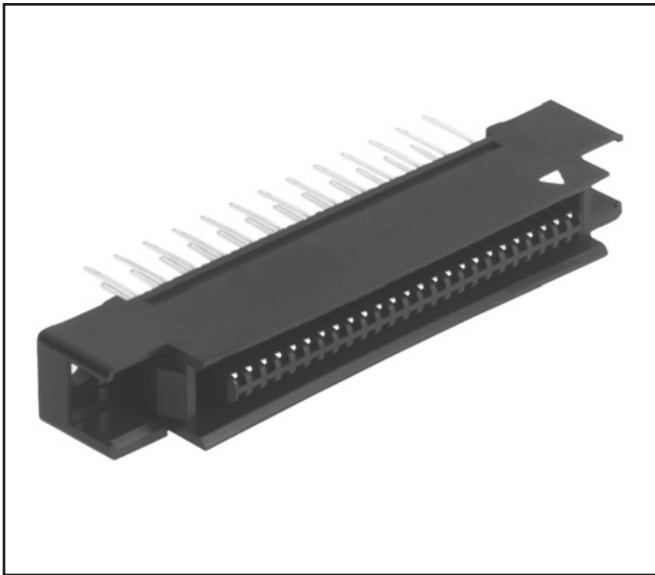


# 3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Through-Hole

P50E Series



- P50E Plug offers straight and right angle through-hole options
- Right angle P50E Plug comes with and without retention clips
- Latch/eject mechanism maintains a secure connection
- Mates to the P25E, P50E, and 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: January 31, 2011

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## Physical

### Insulation:

Material: Glass Filled Nylon  
Flammability: UL 94V-0  
Color: Black

### Contact:

Material: Copper Alloy

### Plating:

Underplating: Nickel  
Wiping Area: 10  $\mu$ " [ 0.25  $\mu$ m ] Gold  
Solder Tails: Gold Flash  
Retention Clips: Tin-Copper  
Mating Compatibility: TS-1143, TS-1141, 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

# 3M™ Pak 50 Boardmount Plug

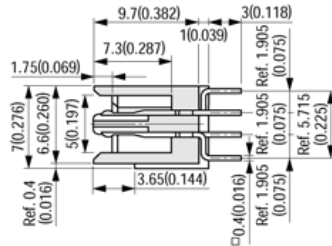
.050" Straight and Right Angle, Through-Hole

P50E Series

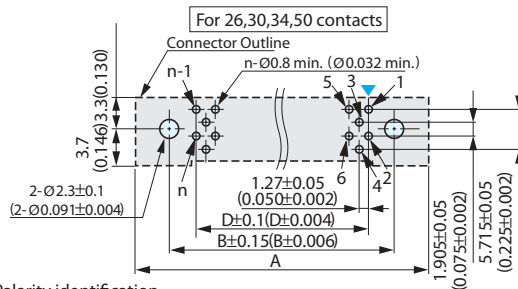
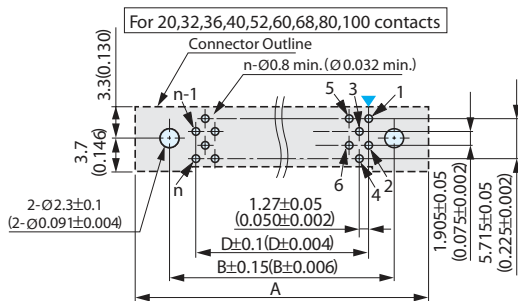
Product Table / Dimensions (For Straight and Right Angles)

Contact Quantity	A	B	C	D
20	27.83 [1.096]	22.86 [0.900]	15.83 [0.623]	11.43 [0.450]
26	31.64 [1.246]	26.67 [1.050]	19.64 [0.773]	15.24 [0.600]
30	34.18 [1.346]	29.21 [1.150]	22.18 [0.873]	17.78 [0.700]
32	35.45 [1.396]	30.48 [1.200]	23.45 [0.923]	19.05 [0.750]
34	36.72 [1.446]	31.75 [1.250]	24.72 [0.973]	20.32 [0.800]
36	37.99 [1.496]	33.02 [1.300]	25.99 [1.023]	21.59 [0.850]
40	40.53 [1.596]	35.56 [1.400]	28.53 [1.123]	24.13 [0.950]
50	46.88 [1.846]	41.91 [1.650]	34.88 [1.373]	30.48 [1.200]
52	48.15 [1.896]	43.18 [1.700]	36.15 [1.423]	31.75 [1.250]
60	53.23 [2.096]	48.26 [1.900]	41.23 [1.623]	36.83 [1.450]
68	58.31 [2.296]	53.34 [2.100]	46.31 [1.823]	41.91 [1.650]
80	65.93 [2.596]	60.96 [2.400]	53.93 [2.123]	49.53 [1.950]
100	78.63 [3.096]	73.66 [2.900]	66.63 [2.623]	62.23 [2.450]

X-X' Cross Section

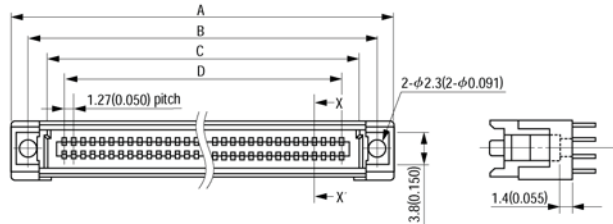
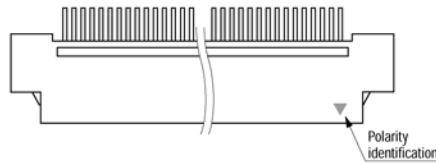


Printed Circuit Board Layout (Component Side View)



▼=Polarity identification

Recommended PCB Thickness  $t=1.6 \pm 0.19(0.063 \pm 0.007)$



## Ordering Information

### P50E - XXXP1 - XXX - EA

Contact Quantity: \_\_\_\_\_  
See Table

Solder Tail/Clip Options:

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

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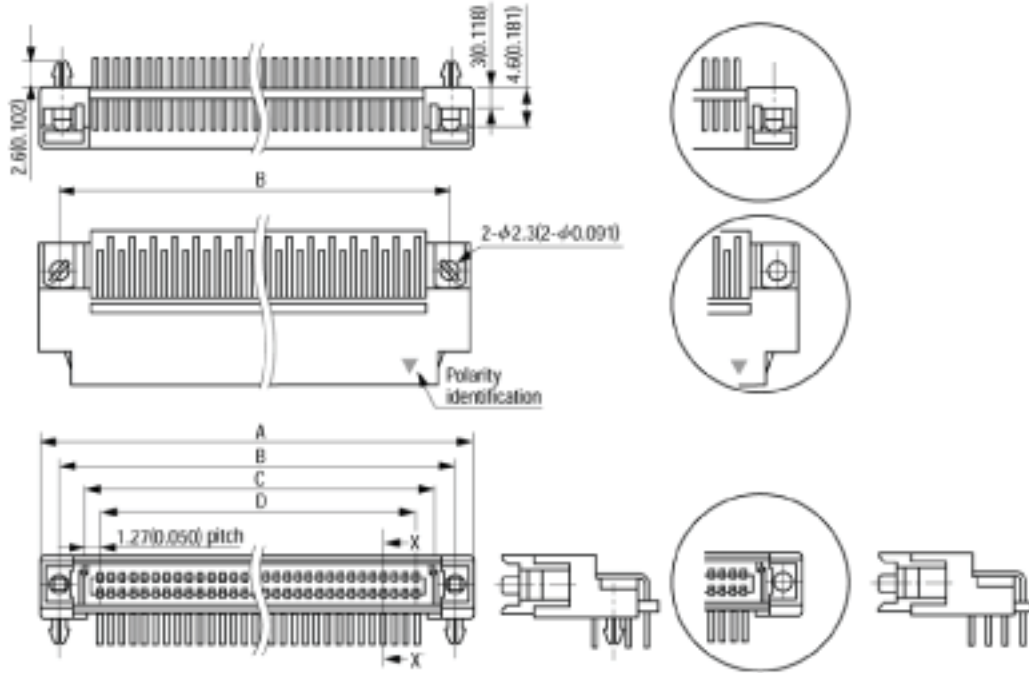
# 3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Through-Hole

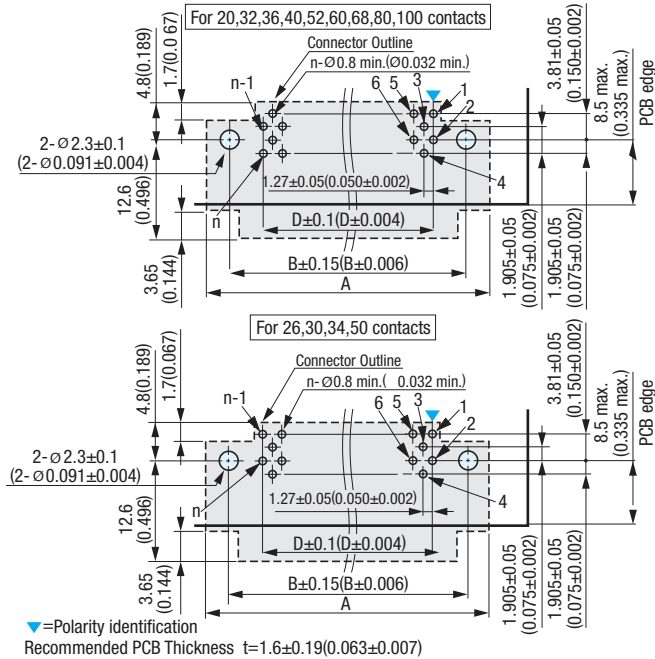
P50E Series

Right Angle Plug with Retention Clips

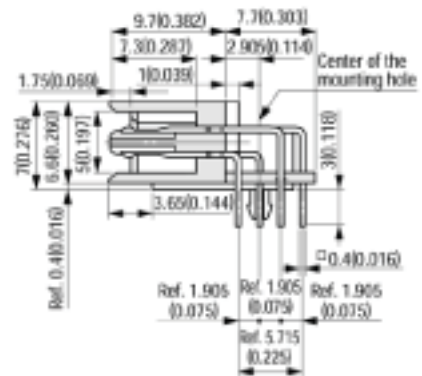
Right Angle Plug without Retention Clips



Printed Circuit Board Layout  
(Component Side View)



X-X' Cross Section



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Sheet 3 of 3

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