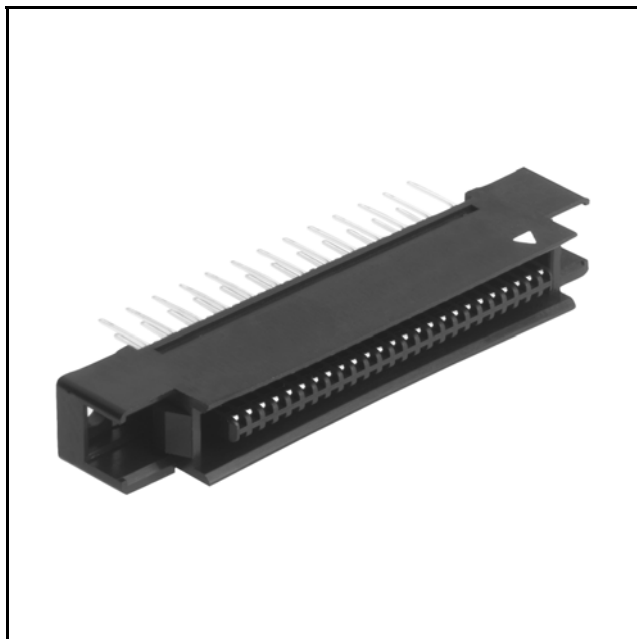


# 3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Thru-Hole

P50E Series



- P50E Plug offers straight and right angle thru-hole options
- Right angle P50E Plug comes with and without retention clips
- Latch/eject mechanism maintains a secure connection
- Mates to the P50E wiremount socket
- RoHS compliant\* version (EA plating suffix) available

Date Modified: February 24, 2006

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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: Tin Alloy over Nickel or Gold Flash (RoHS compliant)(see ordering information)  
Retention Clips: Tin Lead or Tin-Copper (RoHS compliant)

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## Electrical

**Current Rating:** 0.5 A  
**Insulation Resistance:** 10<sup>3</sup>  $\Omega$  at 500 VDC  
**Withstanding Voltage:** 650 VAC for 1 minute

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## Environmental

**Temperature Rating:** -55°C to +85°C  
**Process Rating:** 260°C (ref J-STD-020C)

"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

# 3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Thru-Hole

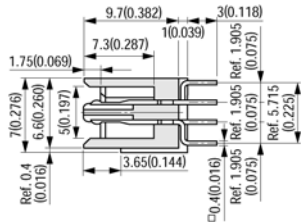
P50E Series

Product Table / Dimensions (For Straight and Right Angle)

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]
40	40.53 [1.596]	35.56 [1.400]	28.53 [1.123]	24.13 [0.950]

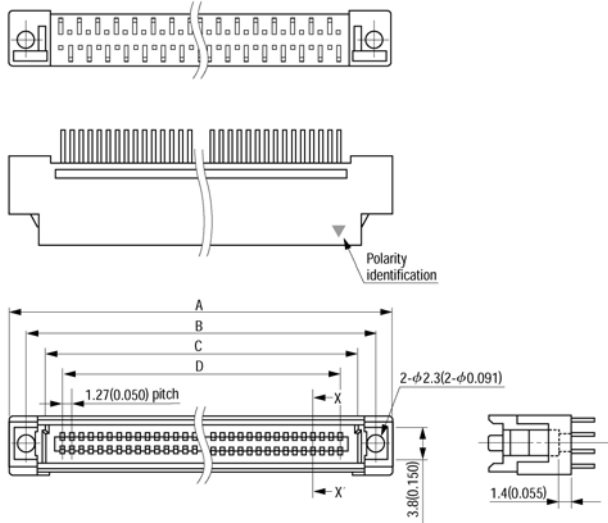
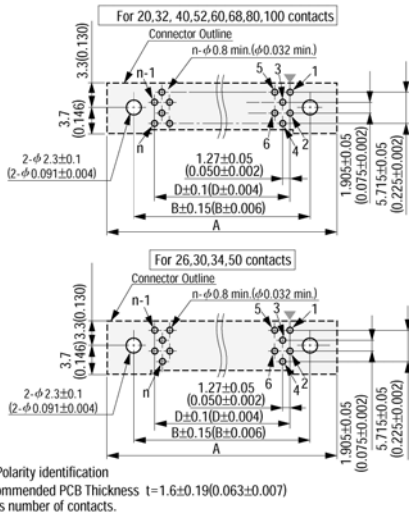
Contact Quantity	A	B	C	D
50	46.88 [1.846]	41.91 [1.650]	34.88 [1.373]	30.48 [1.200]
52	48.15 [1.896]	43.18 [1.700]	36.15 [1.423]	31.75 [1.250]
60	53.23 [2.096]	48.26 [1.900]	41.23 [1.623]	36.83 [1.450]
68	58.31 [2.296]	53.34 [2.100]	46.31 [1.823]	41.91 [1.650]
80	65.93 [2.596]	60.96 [2.400]	53.93 [2.123]	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



Straight Plug

Printed Circuit Board Layout (Component Side View)



## Ordering Information

**P50E - XXXP1 - XXX - XXX**

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

Plating Options:  
TG = 10u" [.25um] gold with Sn-Pb solder tails  
EA = 10u" [.25um] gold with gold flash solder tails (RoHS compliant)

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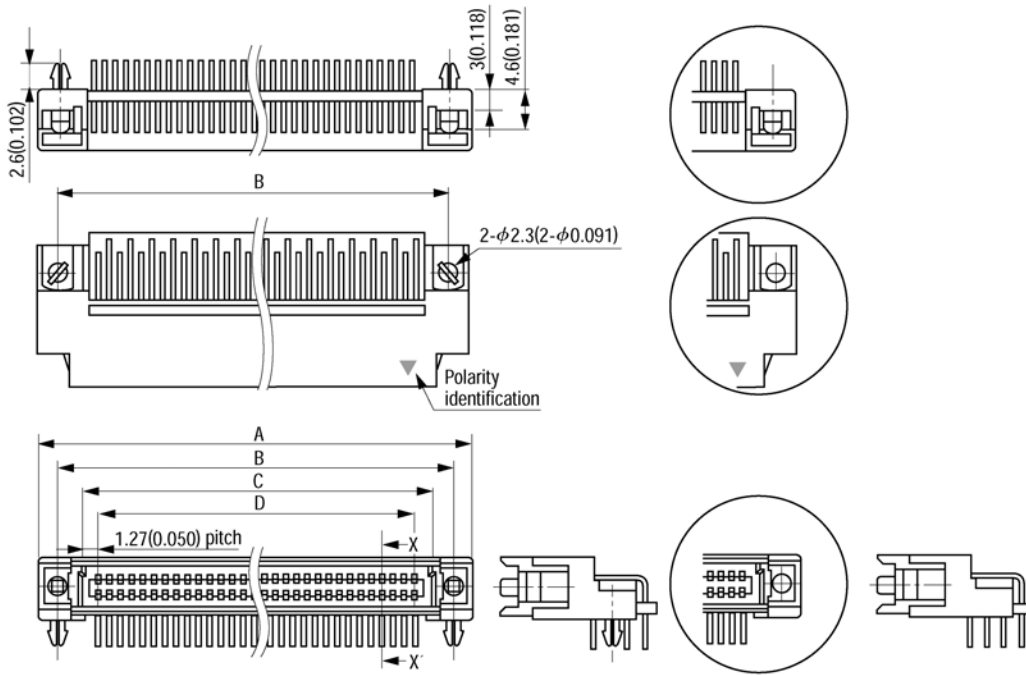
# 3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Thru-Hole

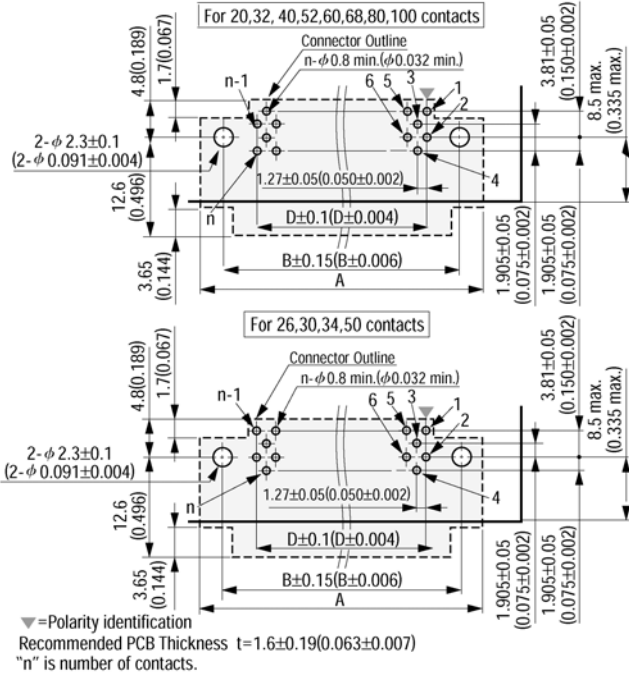
P50E Series

Right Angle Plug with Retention Clips

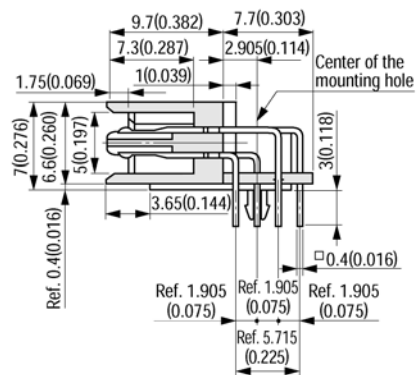
Right Angle Plug without Retention Clips



## Printed Circuit Board Layout (Component Side View)



## X-X' Cross Section



## Important Notice

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Minimum 10%  
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