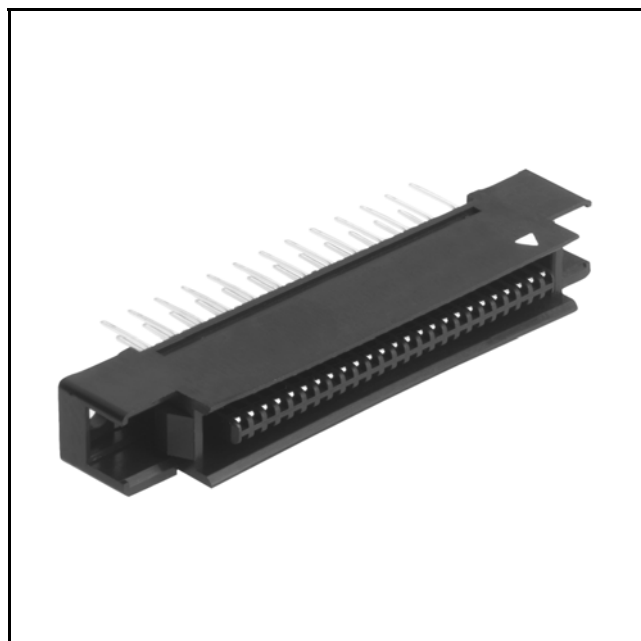


3M™ Pak 50 Boardmount Plug

.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 μ " [0.25 μ 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)

Electrical

Current Rating: 0.5 A
Insulation Resistance: 10³ Ω at 500 VDC
Withstanding Voltage: 650 VAC for 1 minute

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.

P50E Series

Contact Quantity	A	B	C	D
20	27.83	22.86	15.83	11.43
	[1.096]	[0.900]	[0.623]	[0.450]
26	31.64	26.67	19.64	15.24
	[1.246]	[1.050]	[0.773]	[0.600]
30	34.18	29.21	22.18	17.78
	[1.346]	[1.150]	[0.873]	[0.700]
32	35.45	30.48	23.45	19.05
	[1.396]	[1.200]	[0.923]	[0.750]
34	36.72	31.75	24.72	20.32
	[1.446]	[1.250]	[0.973]	[0.800]
40	40.53	35.56	28.53	24.13
	[1.596]	[1.400]	[1.123]	[0.950]

Contact Quantity	A	B	C	D
50	46.88	41.91	34.88	30.48
	[1.846]	[1.650]	[1.373]	[1.200]
52	48.15	43.18	36.15	31.75
	[1.896]	[1.700]	[1.423]	[1.250]
60	53.23	48.26	41.23	36.83
	[2.096]	[1.900]	[1.623]	[1.450]
68	58.31	53.34	46.31	41.91
	[2.296]	[2.100]	[1.823]	[1.650]
80	65.93	60.96	53.93	49.53
	[2.596]	[2.400]	[2.123]	[1.950]
100	78.63	73.66	66.63	62.23
	[3.096]	[2.900]	[2.623]	[2.450]

Technical drawing of a mechanical part with dimensions in inches and millimeters. The drawing shows a cross-section of a component with various features and dimensions. The dimensions are as follows:

- Overall width: 9.70 (0.382)
- Overall height: 30.118
- Top width: 7.30 (0.287)
- Top height: 10.039
- Left side width: 1.75 (0.069)
- Left side height: 70.276
- Left side width: 6.50 (0.260)
- Left side height: 50.197
- Bottom width: 3.65 (0.144)
- Bottom height: 70.40 (0.016)
- Right side width: 1.905 (0.075)
- Right side height: 1.905 (0.075)
- Right side width: 5.715 (0.225)
- Right side height: 1.905 (0.075)
- Right side width: 1.905 (0.075)
- Right side height: 1.905 (0.075)

Figure 1: Dimensions of the connector. The figure shows three views of the connector: a top view, a side view, and a front view. The top view shows the connector with a central break line. The side view shows the profile of the connector, with a label 'Polarity identification' pointing to a specific feature. The front view shows the connector from the front, with dimensions A, B, C, and D indicating different lengths. A pitch of 1.27(0.050) is specified for the pins. The front view also shows a 2-φ2 hole and a 3.8(0.150) dimension.

P50E - XXXP1 - XXX - XXX

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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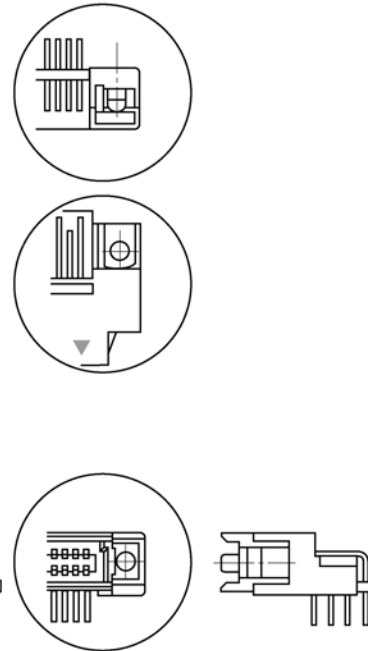
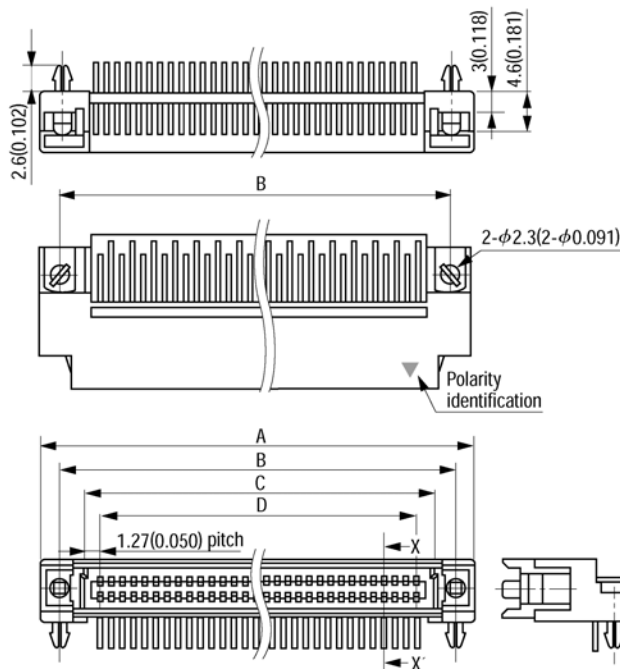
3M™ Pak 50 Boardmount Plug

.050" Straight and Right Angle, Thru-Hole

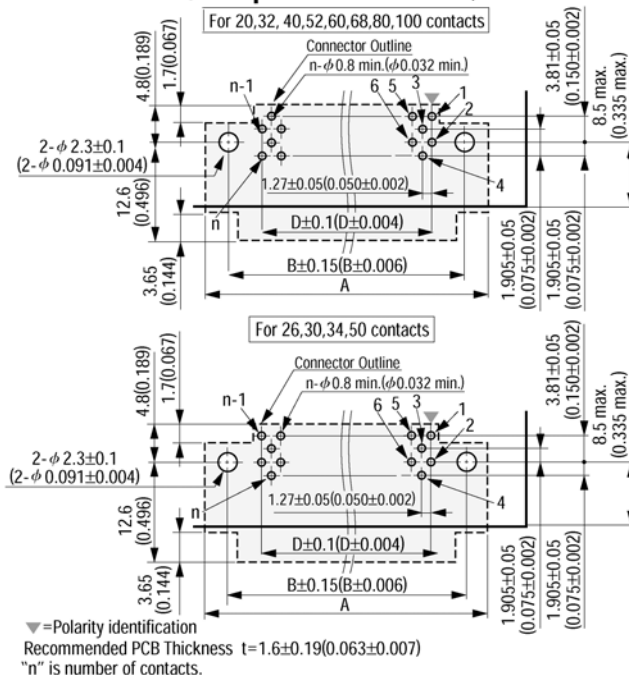
P50E Series

Right Angle Plug with Retention Clips

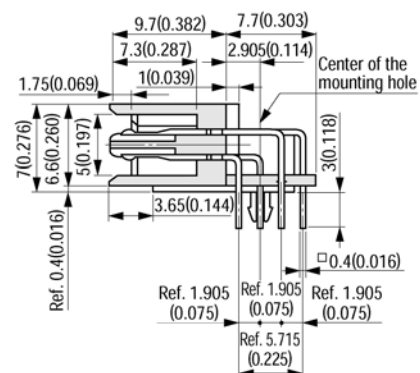
Right Angle Plug without Retention Clips



Printed Circuit Board Layout
(Component Side View)



X-X' Cross Section



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Interconnect Solutions

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