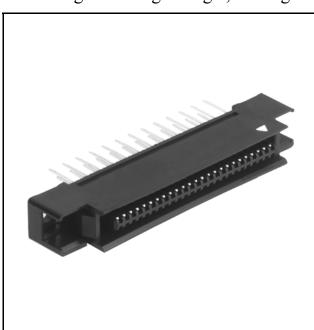
3M™ Pak 50 Boardmount Plug

.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 P50E wiremount socket
- RoHS* compliant

Date Modified: December 13, 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: Gold Flash Retention Clips: Tin-Copper

Electrical

Current Rating: 0.5 A

Insulation Resistance: $10^3~\Omega$ at $500~V_{DC}$

Withstanding Voltage: 650 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Process Rating: 260°C (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.

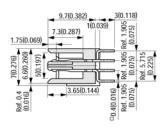
P50E Series

Product Table / Dimensions (For Straight and Right Angle)

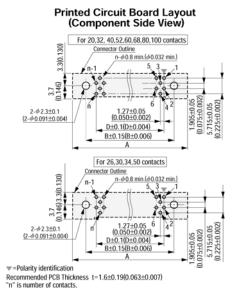
			_	_
Contact Quantity	Α	В	С	D
20	27.83	22.86	15.83	11.43
	[1.096]	[0.900]	[0.623]	[0.450]
26	31.64	26.67	19.64	15.24
	[1.246]	[1.050]	[0.773]	[0.600]
30	34.18	29.21	22.18	17.78
	[1.346]	[1.150]	[0.873]	[0.700]
32	35.45	30.48	23.45	19.05
	[1.396]	[1.200]	[0.923]	[0.750]
34	36.72	31.75	24.72	20.32
	[1.446]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

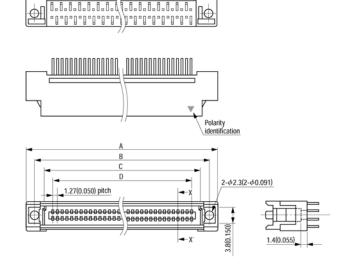
Contact Quantity	Α	В	С	D
50	46.88	41.91	34.88	30.48
	[1.846]	[1.650]	[1.373]	[1.200]
52	48.15	43.18	36.15	31.75
	[1.896]	[1.700]	[1.423]	[1.250]
60	53.23	48.26	41.23	36.83
	[2.096]	[1.900]	[1.623]	[1.450]
68	58.31	53.34	46.31	41.91
	[2.296]	[2.100]	[1.823]	[1.650]
80	65.93	60.96	53.93	49.53
	[2.596]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

X-X´ Cross Section

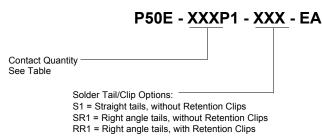


Straight Plug





Ordering Information



TS-1144-03 Sheet 2 of 3

Right Angle Plug with Retention Clips Right Angle Plug without Retention Clips 2-\phi 2.3(2-\phi 0.091) Polarity identification 1.27(0.050) pitch ### T **Printed Circuit Board Layout** (Component Side View) For 20,32, 40,52,60,68,80,100 contacts 4.8(0.189) Connector Outline n-\$\phi 0.8 \text{ min.} (\$\phi 0.032 \text{ min.}) X-X´ Cross Section 2-φ2.3±0.1 (2-φ0.091±0.004) .27±0.05(0.050±0.002) 7.7(0.303) 9.7(0.382) 2.905(0.114) Center of the 7.3(0.287) 1.905±0.05 (0.075±0.002) D±0.1(D±0.004) (0.075 ± 0.002) 1.75(0.069) mounting hole 6.6(0.260) For 26,30,34,50 contacts 4.8(0.189) Connector Outline 0.4(0.016) Ref. 1.905 (0.075) Ref. 1.905 (0.075) Ref. 1.905 (0.075) 2- \phi 2.3\pm 0.1 Ref. $(2-\phi \ 0.091\pm 0.004)$ (0.075) (0.075) 1.27±0.05(0.050±0.002) Ref. 5.715 (0.225)1.905±0.05 (0.075±0.002) 1.905±0.05 (0.075±0.002) D±0.1(D±0.004) 3.65 B±0.15(B±0.006) ▼=Polarity identification Recommended PCB Thickness $t=1.6\pm0.19(0.063\pm0.007)$ "n" is number of contacts. TS-1144-03 Sheet 3 of 3

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