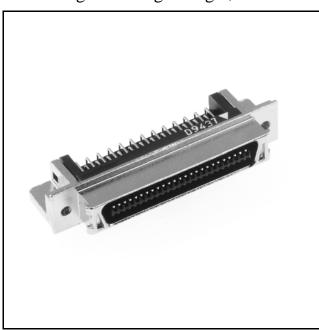
# 3M<sup>™</sup> Pak 50 I/O Plug

.050" Straight and Right Angle, Boardmount

P50 Series



- EMI shielded
- 20 to 100 position
- Mates to P50 Series cable mount socket
- RoHS\* compliant

Date Modified: October 2, 2006

TS-1147-02 Sheet 1 of 7

# **Physical**

**Insulation** 

Material: Glass Filled Nylon

Flammability: UL 94V-0

Color: Black

Contact

Material: Phosphor Bronze

**Plating** 

Underplating: Nickel

Wiping Area: 10 μ" [ 0.25 μm ] Gold

Solder Tails: Gold Flash

# **Electrical**

Current Rating: 0.5 A

**Insulation Resistance:**  $10^3$  M $\Omega$  min. at 500 VDC **Withstanding Voltage:** 650 VAC for 1 minute

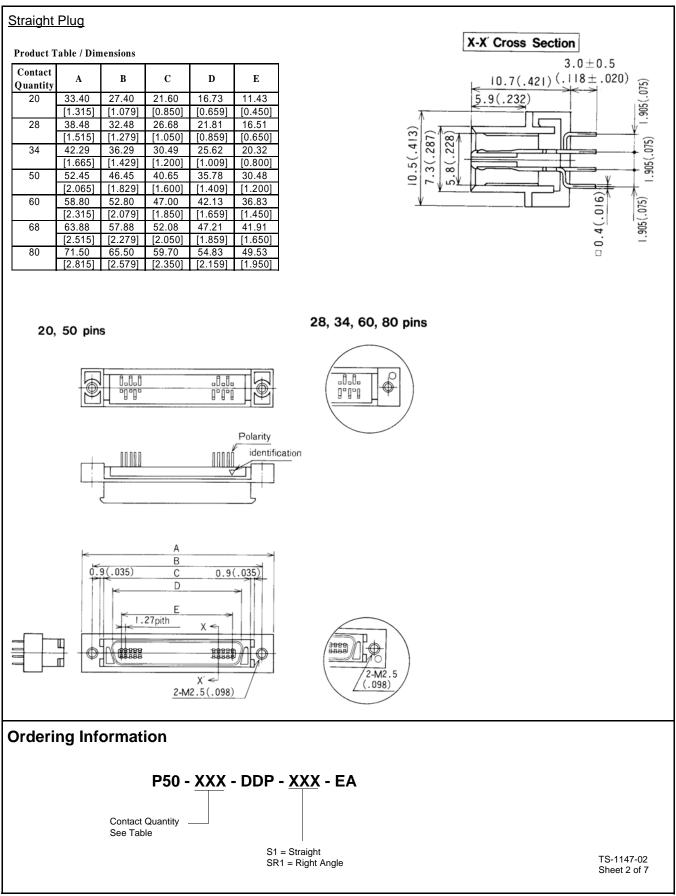
## **Environmental**

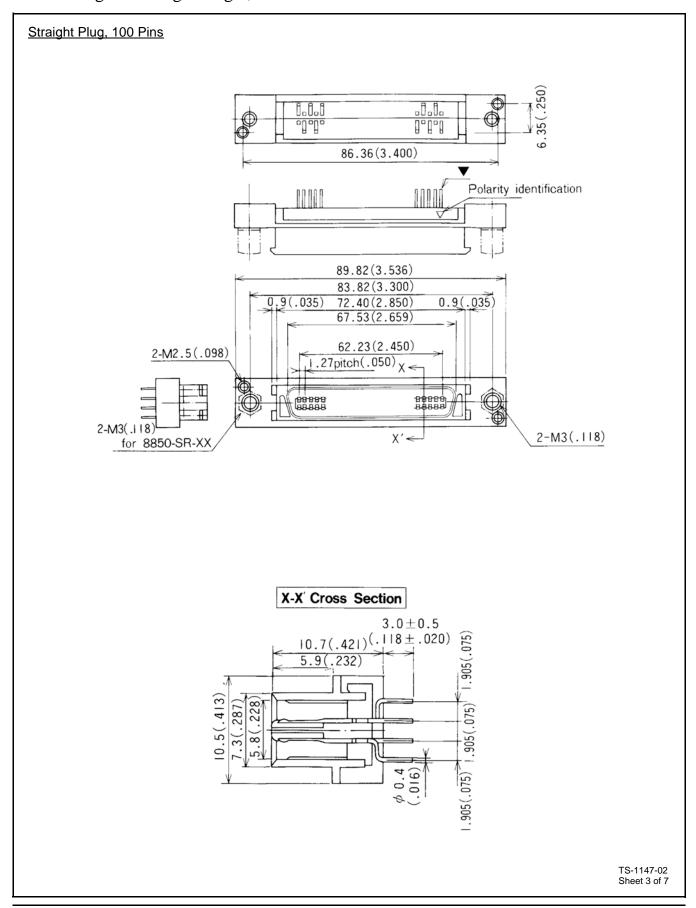
**Temperature Rating:** -55°C to +85°C

**Process Rating:** 260°C (per 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 in writing by 3M, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M.

**Interconnect Solutions** 





## Straight Plug

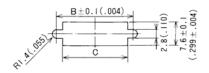
#### Product Table / Dim ensions

Contact Quantity	A	В	С
20	11.43	27.40	24.40
	[0.450]	[1.079]	[0.961]
28	16.51	32.48	29.48
	[0.650]	[1.279]	[1.161]
3 4	20.32	36.29	33.29
	[0.800]	[1.429]	[1.311]
5 0	30.48	46.45	43.45
	[1.200]	[1.829]	[1.711]
6 0	36.83	52.80	49.80
	[1.450]	[2.079]	[1.961]
6 8	41.91	57.88	54.88
	[1.650]	[2.279]	[2.161]
8 0	49.53	65.50	62.50
	[1.950]	[2.579]	[2.461]

#### **Panel Cutout Dimensions**

20, 28, 34, 50, 60, 68, 80 pins

Recommended panel thickness: 2.0max.(.079)

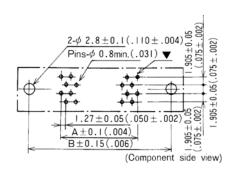


Recommended PCB Thickness: 1.6 \$ 0.19 mm [ 0.063 \$ .007 ]

### **Printed Circuit Board Layout**

Recommended PCB Thickness: 1.6 \$ 0.19 mm [ 0.063 \$ .007 ]

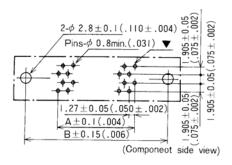
#### 34, 50 Pins



#### **Printed Circuit Board Layout**

Recommended PCB Thickness: 1.6 \$ 0.19 mm [ 0.063 \$ .007 ]

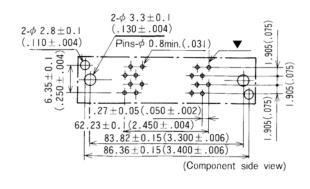
# 20, 28, 60, 68, 80 Pins



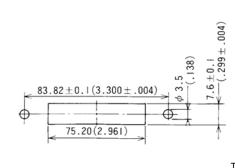
#### **Panel Cutout Dimensions**

Recommended Panel Thickness: 1.6 mm max. [ 0.063 ]

#### 100 Pins



#### 100 Pins



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**3M** 

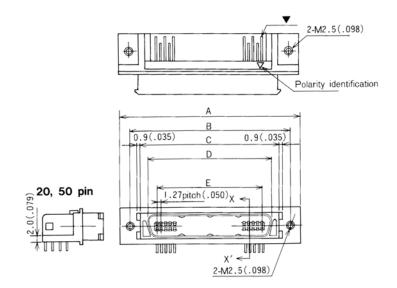
Interconnect Solutions
http://www.3M.com/interconnects/

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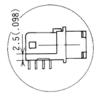
# Right Angle Plug

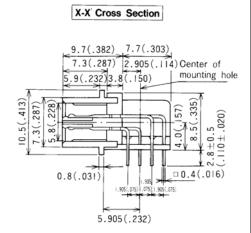
#### **Product Table / Dimensions**

Contact Quantity	A	В	C	D	E
20	33.40	27.40	21.60	16.73	11.43
	[1.315]	[1.079]	[0.850]	[0.659]	[0.450]
28	38.48	32.48	26.68	21.81	16.51
	[1.515]	[1.279]	[1.050]	[0.859]	[0.650]
34	42.29	36.29	30.49	25.62	20.32
	[1.665]	[1.429]	[1.200]	[1.009]	[0.800]
50	52.45	46.45	40.65	35.78	30.48
	[2.065]	[1.829]	[1.600]	[1.409]	[1.200]
60	58.80	52.80	47.00	42.13	36.83
	[2.315]	[2.079]	[1.850]	[1.659]	[1.450]
68	63.88	57.88	52.08	47.21	41.91
	[2.515]	[2.279]	[2.050]	[1.859]	[1.650]
80	71.50	65.50	59.70	54.83	49.53
	[2.815]	[2.579]	[2.350]	[2.159]	[1.950]

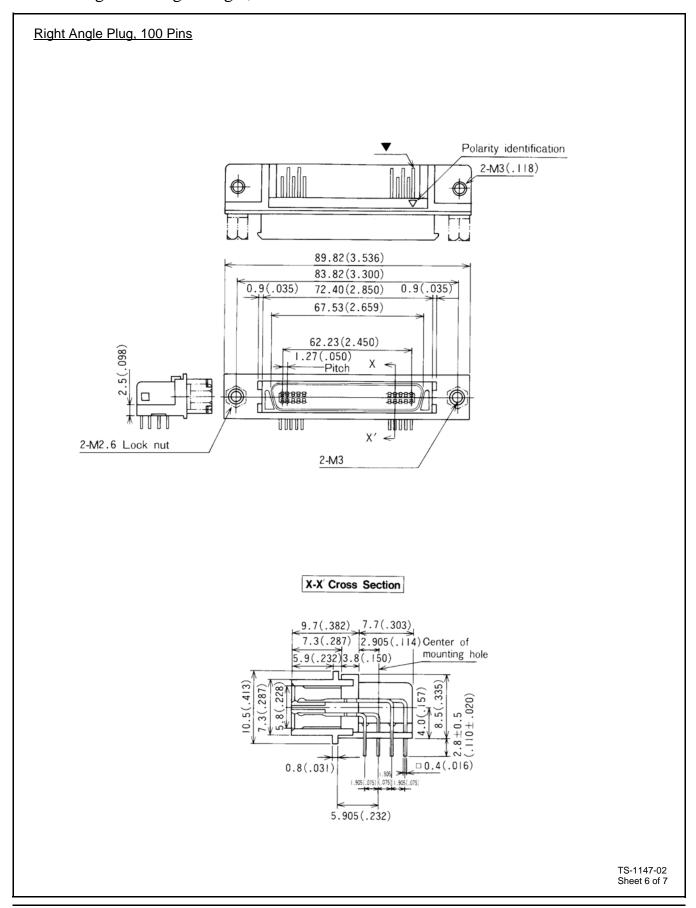


28, 34, 60, 80 pin





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## Right Angle

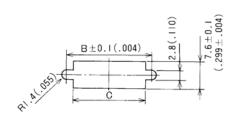
Product Table / Dimensions

Contact Quantity	A	В	С
20	11.43	27.40	24.40
	[0.450]	[1.079]	[0.961]
28	16.51	32.48	29.48
	[0.650]	[1.279]	[1.161]
3 4	20.32	36.29	33.29
	[0.800]	[1.429]	[1.311]
5 0	30.48	46.45	43.45
	[1.200]	[1.829]	[1.711]
6 0	36.83	52.80	49.80
	[1.450]	[2.079]	[1.961]
6 8	41.91	57.88	54.88
	[1.650]	[2.279]	[2.161]
8 0	49.53	65.50	62.50
	[1.950]	[2.579]	[2.461]

#### **Panel Cutout Dimensions**

Recommended Panel Thickness: 2.0 mm [ 0.079 ]

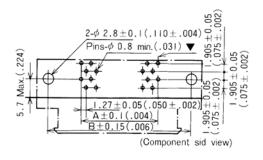
20, 28, 34, 50, 60, 68, 80 Pins



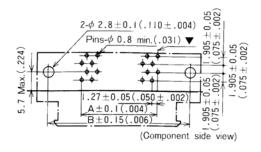
#### **Printed Circuit Board Layout**

Recommended PCB Thickness: 1.6 \$ 0.19 mm [ 0.063 \$ .007 ]

#### 34, 50 Pins



#### 20, 28, 60, 68, 80 Pins



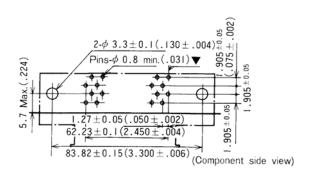
## **Printed Circuit Board Layout**

Recommended PCB Thickness: 1.6 \$ 0.19 mm [ 0.063 \$ .007 ]

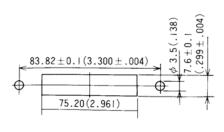
## **Panel Cutout Dimensions**

Recommended Panel Thickness: 1.6 mm max. [ 0.063 ]

#### 100 Pins



#### 100 Pins



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