

3M™ 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

Date Modified: May 15, 2003

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Physical

Insulation

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

Contact

Material: Phosphor Bronze

Plating

Underplating: Nickel
Wiping Area: See Ordering Information
Solder Tails: Tin Alloy over Nickel

Electrical

Current Rating: 0.5 A
Insulation Resistance: 10^3 M Ω min. at 500 V DC
Withstanding Voltage 650 V AC for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

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P50 Series

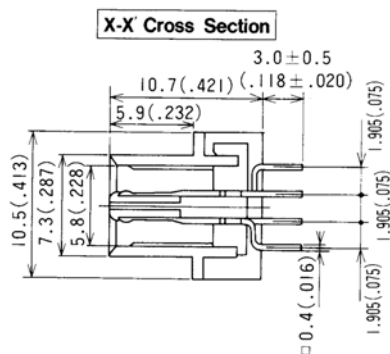
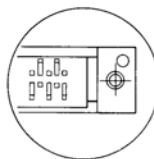
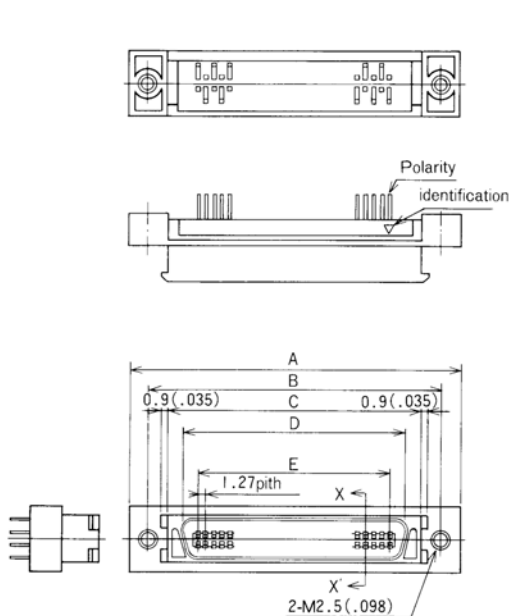
Straight Plug

Product Table / Dimensions

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

20, 50 pins

28, 34, 60, 80 pins



Ordering Information

P50 - XXX - DDP - XXX - XXXX

Contact Quantity
See Table

S1 = Straight
SR1 = Right Angle

Plating Options:
TG = 10 μ" [0.25 μm] min. Gold
TG30 = 30 μ" [0.75 μm] min. Gold

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P50 Series

Technical drawing of the 8850-SR-XX connector showing three views: top, side, and front views.

Top View Dimensions:

- Overall width: 86.36 (3.400)
- Overall height: 6.35 (.250)

Side View:

- Feature: Polarity identification

Front View Dimensions:

- Overall width: 89.82 (3.536)
- Overall height: 83.82 (3.300)
- Pin pitch: 1.27pitch (.050) X
- Pin spacing (left): 0.9 (.035)
- Pin spacing (right): 0.9 (.035)
- Pin spacing (center): 72.40 (2.850)
- Pin spacing (center): 67.53 (2.659)
- Pin spacing (center): 62.23 (2.450)

Mounting Features:

- 2-M2.5 (.098)
- 2-M3 (.118) for 8850-SR-XX
- 2-M3 (.118)

[illegible]

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800-225-5373

Straight Plug

Product Table / Dimensions

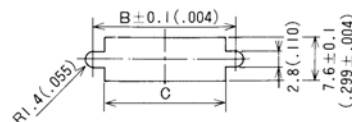
Contact Quantity	A	B	C
20	11.43 [0.450]	27.40 [1.079]	24.40 [0.961]
28	16.51 [0.650]	32.48 [1.279]	29.48 [1.161]
34	20.32 [0.800]	36.29 [1.429]	33.29 [1.311]
50	30.48 [1.200]	46.45 [1.829]	43.45 [1.711]
60	36.83 [1.450]	52.80 [2.079]	49.80 [1.961]
68	41.91 [1.650]	57.88 [2.279]	54.88 [2.161]
80	49.53 [1.950]	65.50 [2.579]	62.50 [2.461]

Panel Cutout Dimensions

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

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

Recommended panel thickness: 2.0max. (.079)

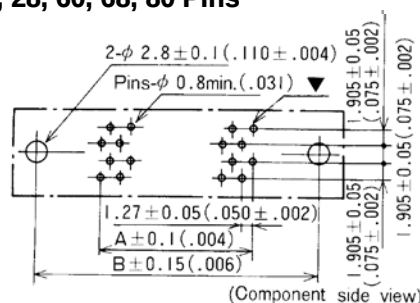
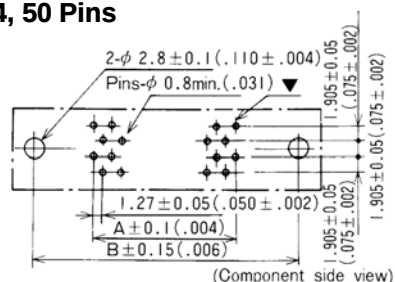


Printed Circuit Board Layout

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

20, 28, 60, 68, 80 Pins

34, 50 Pins



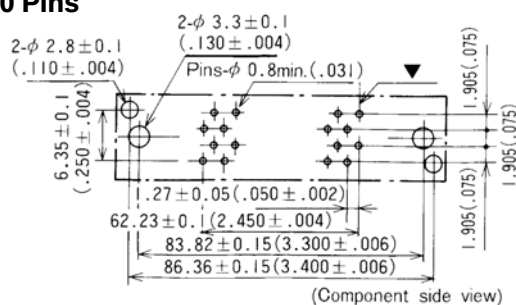
Printed Circuit Board Layout

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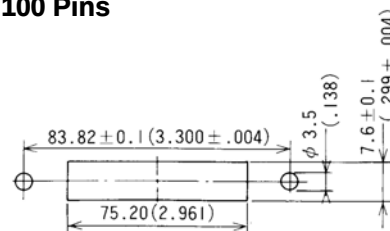
Panel Cutout Dimensions

Recommended Panel Thickness: 1.6 mm max. [0.063]

100 Pins



100 Pins



3M™ Pak 50 I/O Plug

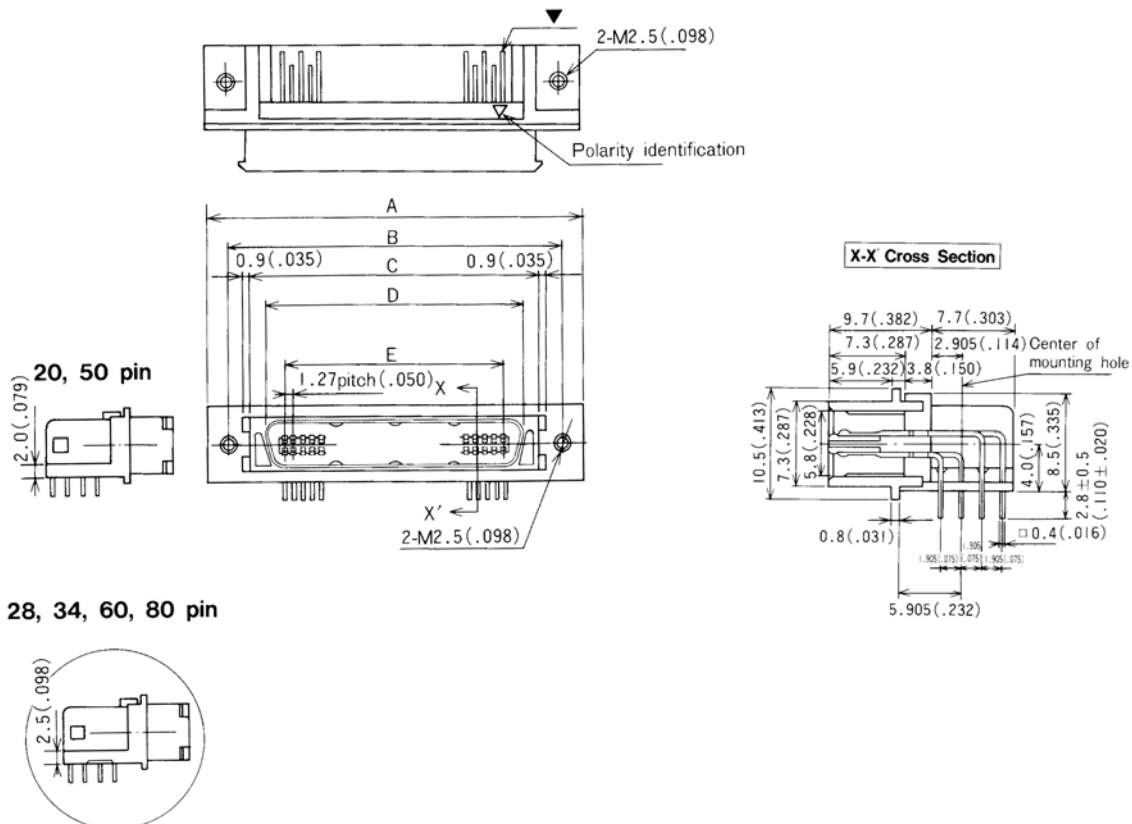
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Right Angle Plug

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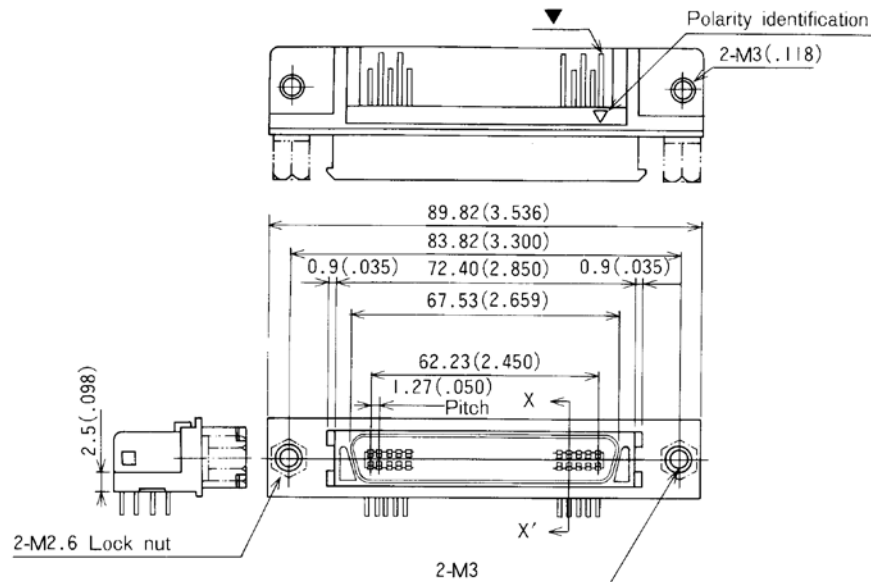
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3M™ Pak 50 I/O Plug

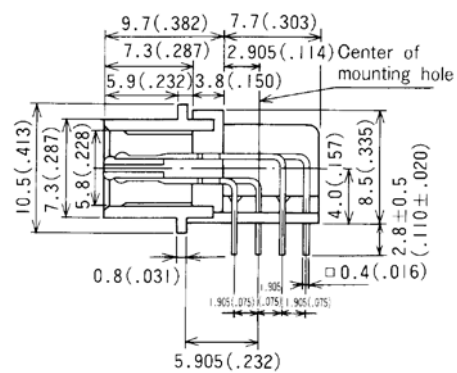
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P50 Series

Right Angle Plug, 100 Pins



X-X' Cross Section



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Right Angle

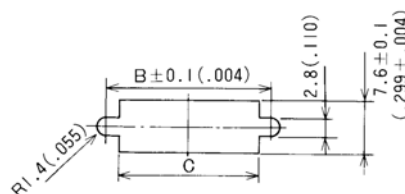
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Panel Cutout Dimensions

Recommended Panel Thickness: 2.0 mm [0.079]

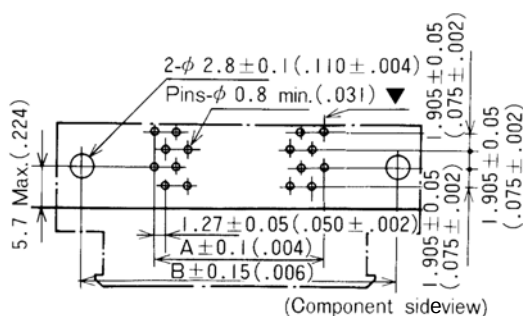
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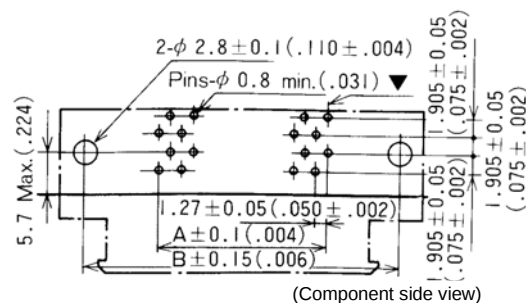
Printed Circuit Board Layout

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

34, 50 Pins



20, 28, 60, 68, 80 Pins



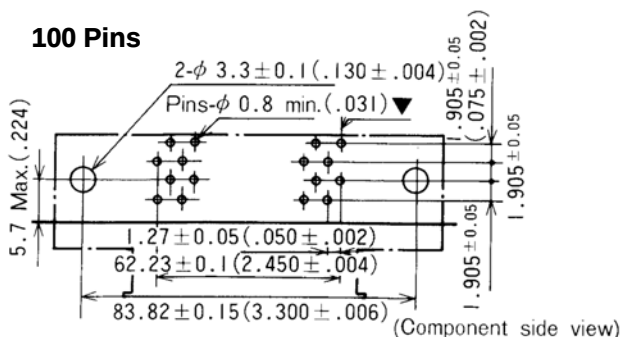
Printed Circuit Board Layout

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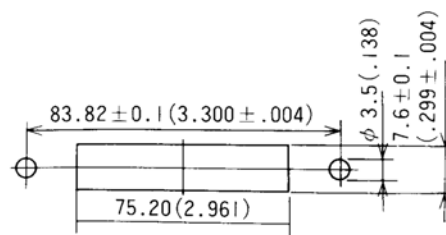
Panel Cutout Dimensions

Recommended Panel Thickness: 1.6 mm max. [0.063]

100 Pins



100 Pins



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