$3M^{\,\text{\tiny TM}}\,\,Pak\,\,50\,\,I/O\,\,Plug\\ .050''\,\,\text{Straight and Right Angle, Boardmount}$





- EMI shielded
- 20 to 100 position
- · Mates to P50 series cable mount socket

Date Modified: May 15, 2003

TS-1147-01 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: See Ordering Information Solder Tails: Tin Alloy over Nickel

Electrical

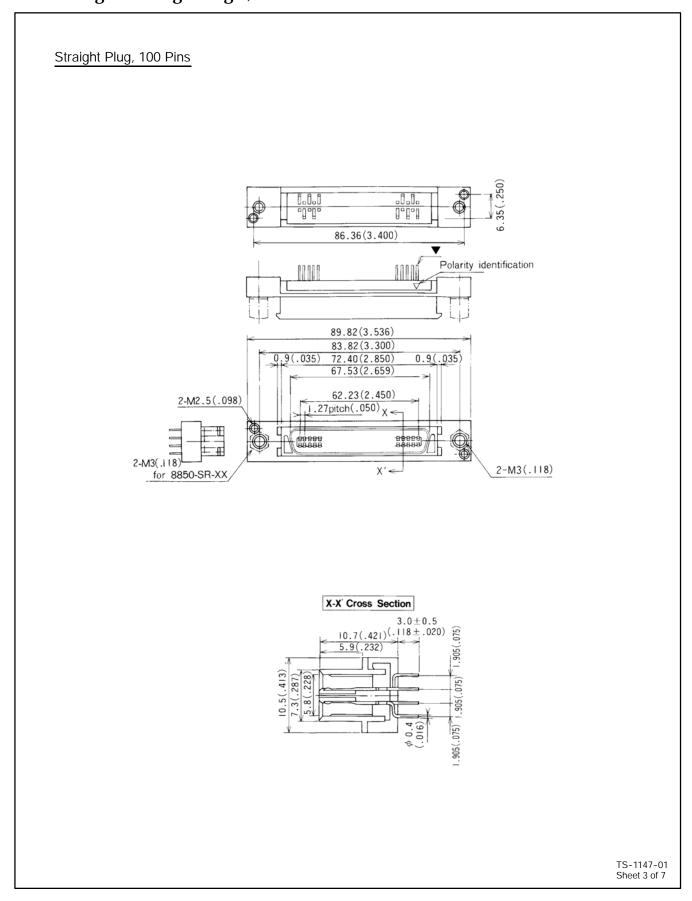
Current Rating: 0.5 A

Insulation Resistance: $10^3 \text{ M}\Omega \text{ min.}$ at 500 V DCWithstanding Voltage 650 V AC for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Straight Plug **Product Table / Dimensions** Contact D В \mathbf{C} E Quantity 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 [1.279] [1.050] [1.515] [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]46.45 50 52.45 40.65 35.78 30.48 [2.065] [1.829] [1.600] [1.409] [1.200] 60 52.80 47.00 42.13 58.80 36.83 [2.315] [2.079] [1.850] [1.659] [1.450] 52.08 63.88 57.88 47.21 41.91 [2.279] [2.050] [1.859] [1.650] [2.515] 49.53 71.50 65.50 59.70 54.83 [2.159] [2.815] [1.950 28, 34, 60, 80 pins 20, 50 pins X-X Cross Section $\textbf{3.0} \!\pm\! \textbf{0.5}$ 10.7(.421)(.118±.020) identification 5.9(.232) 902 5(.413) 7.3(.287) 228) .905 0.4(.016) 0.9(.035) 0.9(.035 1.27pith 2-M2.5 2-M2.5(.098) **Ordering Information** P50 - XXX - DDP - <u>XXX</u> - <u>XXXX</u> Contact Quantity -Plating Options: $TG = 10 \ \mu^{\prime\prime} \ [\ 0.25 \ \mu m \] \ min. \ Gold$ See Table $TG30 = 30 \,\mu'' \,[\, 0.75 \,\mu m \,] \, min. \, Gold$ S1 = Straight SR1 = Right Angle TS-1147-01 Sheet 2 of 7



Straight Plug

Product Table / Dimensions

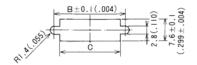
Contact Quantity	A	В	C
20	11.43	27.40	24.40
	[0.450]	[1.079]	[0.961]
28	16.51	32.48	29.48
	[0.650]	[1.279]	[1.161]
34	20.32	36.29	33.29
	[0.800]	[1.429]	[1.311]
50	30.48	46.45	43.45
	[1.200]	[1.829]	[1.711]
60	36.83	52.80	49.80
	[1.450]	[2.079]	[1.961]
68	41.91	57.88	54.88
	[1.650]	[2.279]	[2.161]
80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

Panel Cutout Dimensions

Recommended PCB Thickness: $1.6 \pm 0.19 \text{ mm} [0.063 \pm .007]$

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

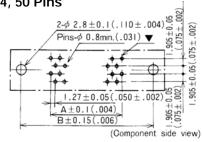
Recommended panel thickness: 2.0max.(.079)



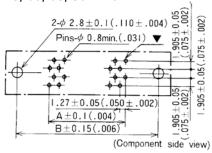
Printed Circuit Board Layout

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

34, 50 Pins



20, 28, 60, 68, 80 Pins

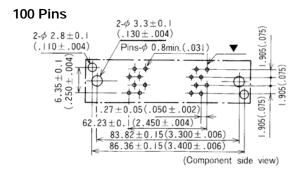


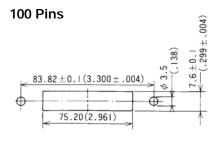
Printed Circuit Board Layout

Recommended PCB Thickness: $1.6 \pm 0.19 \text{ mm} [0.063 \pm .007]$

Panel Cutout Dimensions

Recommended Panel Thickness: 1.6 mm max. [0.063]



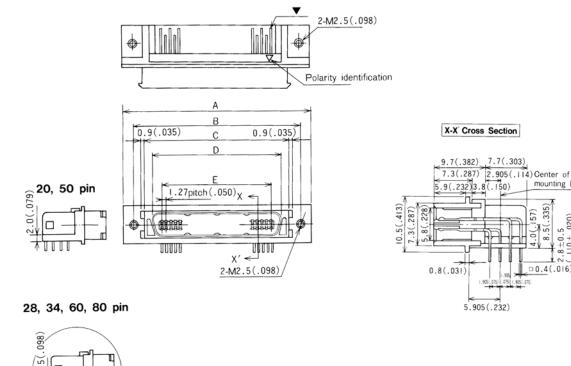


TS-1147-01 Sheet 4 of 7

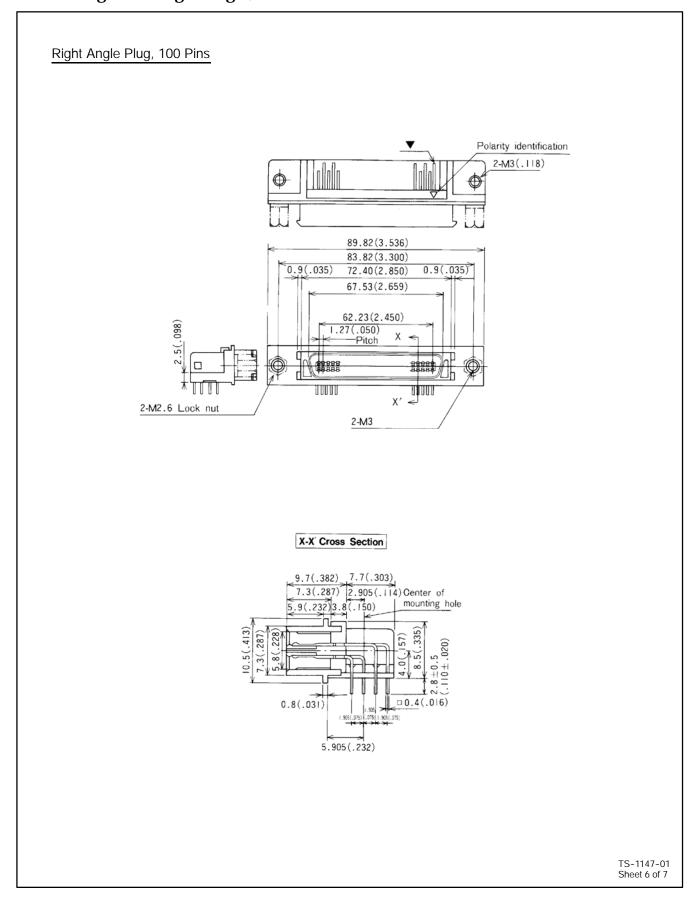
Right Angle Plug

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]



TS-1147-01 Sheet 5 of 7



Right Angle

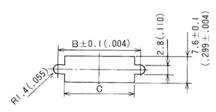
Product Table / Dimensions

Contact Quantity	A	В	C
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]
34	20.32	36.29	33.29
	[0.800]	[1.429]	[1.311]
50	30.48	46.45	43.45
	[1.200]	[1.829]	[1.711]
60	36.83	52.80	49.80
	[1.450]	[2.079]	[1.961]
68	41.91	57.88	54.88
	[1.650]	[2.279]	[2.161]
80	49.53	65.50	62.50
	[1.950]	[2.579]	[2.461]

Panel Cutout Dimensions

Recommended Panel Thickness: 2.0 mm [0.079]

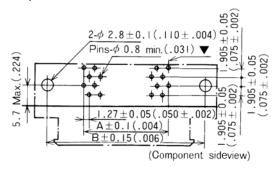
20, 28, 34, 50, 60, 68, 80 Pins



Printed Circuit Board Layout

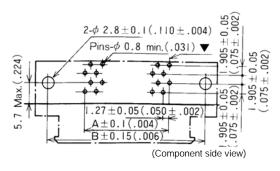
Recommended PCB Thickness: 1.6 \pm 0.19 mm [0.063 \pm .007]

34, 50 Pins



20, 28, 60, 68, 80 Pins

100 Pins

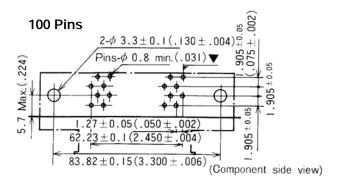


Printed Circuit Board Layout

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

Panel Cutout Dimensions

Recommended Panel Thickness: 1.6 mm max. [0.063]



83.82±0.1(3.300±.004) 7.6±0.1 7.6±0.1 7.6±0.1 7.6±0.1

75.20(2.961)

TS-1147-01 Sheet 7 of 7

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