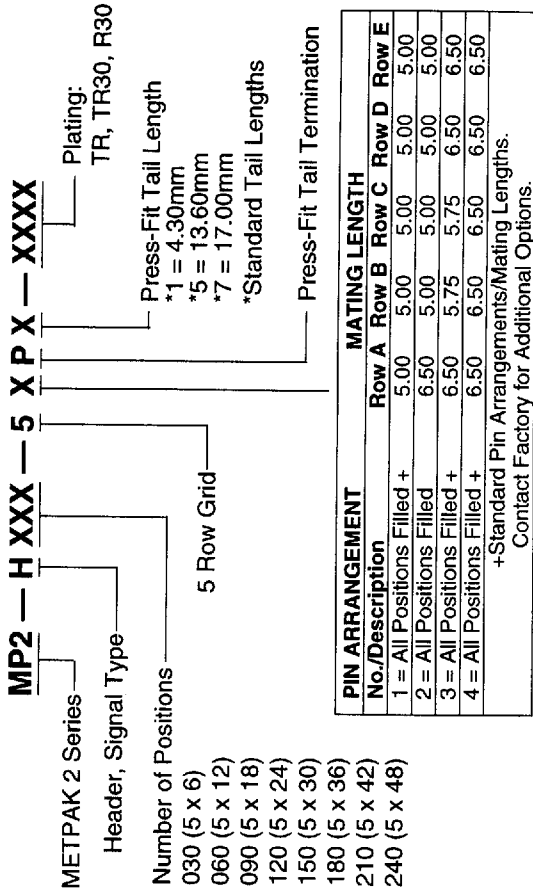
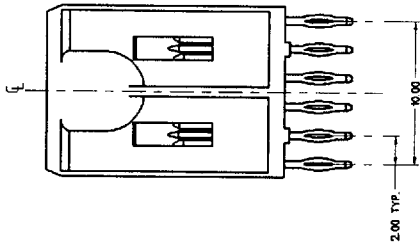
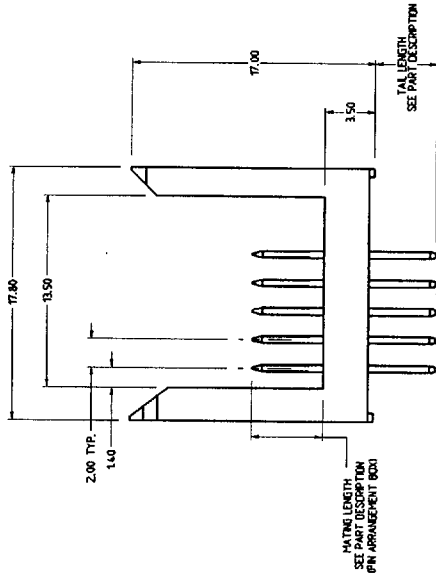


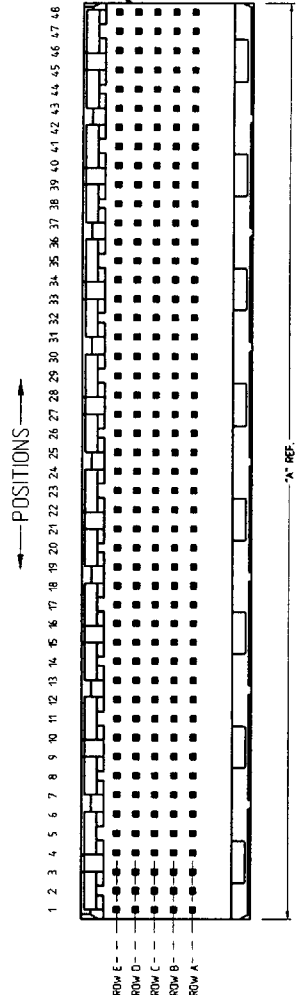
ISO VIEW



PIN ARRANGEMENT	MATING LENGTH			
	Row A	Row B	Row C	Row D
1 = All Positions Filled +	5.00	5.00	5.00	5.00
2 = All Positions Filled	6.50	5.00	5.00	5.00
3 = All Positions Filled +	6.50	5.75	5.75	6.50
4 = All Positions Filled +	6.50	6.50	6.50	6.50

+Standard Pin Arrangements/Mating Lengths.
Contact Factory for Additional Options.

CUSTOMER DRAWING
ALL DIMENSIONS
IN MILLIMETERS




Robinson Nugent
812/945-0211 812/945-0805 FAX
METPAK 2™ MP2-HXXX-5XPX-XX
(Male, Signal, Straight, Press-fit, 5-Row Grid)

- Notes:
1. This connector is designed to comply with IEC 1076-4-001, 48B and EIA/SP-3179 2mm 2-part connectors
 2. Mating Products: Right angle signal type sockets: MP2-SXXX-5XXX-XX

MATERIALS

Housing:	High temperature, 30% glass-filled, liquid crystal polymer	Plating: TR =	10 μ inch ROBEX® [7 μ inch (.178 μ m) minimum Palladium Nickel with 3 μ inch (.076 μ m) minimum Gold flash on contact area. 100 μ inch (2.54 μ m) minimum Tin/Lead on terminal area.
Contacts:	Standard Header - Phosphor Bronze Inverse Header - Copper Alloy Socket - Beryllium Copper	TR30 =	30 μ inch ROBEX® [27 μ inch (.686 μ m) minimum Palladium Nickel with 3 μ inch (.076 μ m) minimum Gold flash on contact area. 100 μ inch (2.54 μ m) minimum Tin/Lead on terminal area.
Packaging:	Anti-static PVC tubes		
Flammability:	UL 94V-0		All options include an underplate of 50 μ inch (1.27 μ m) minimum Nickel.

MECHANICAL

Insertion Force: (average/contact)	33 grams	Power Contact	110 grams	Agency Approvals  #73746
Withdrawal Force: (minimum/contact)	20 grams		30 grams	
Normal Force: (average/beam)	70 grams		100 grams	
Durability: TR Plating:	500 cycles		500 cycles	
	TR30 Plating:	5000 cycles	5000 cycles	
	R30 Plating:	5000 cycles	5000 cycles	

ELECTRICAL

Current Rating: 3.0 Amps per signal socket/header contact*
6.50 Amps per power socket/header contact* at 70°C.

Insulation Resistance: 5000 megohms initial
1000 megohms after exposure
(Per signal/power socket/header module)

Dielectric Withstanding: 1500 Volts AC

Capacitance: Maximum 1 pF capacitive coupling between adjacent contacts per mated (socket & header assembled) signal module
Maximum 3 pF capacitive coupling between one line and all other surrounding lines grounded, per mated signal module

Inductance: Total inductance for adjacent contact pairs, all inductances in nH (4 row connector)

	Row A	Row B	Row C	Row D
Row A	14.1	15.6		
Row B		16.8	17.5	
Row C			18.9	19.2
Row D				20.9

Total inductance for a contact in the given row with all other surrounding contacts (grounded), in nH (4 row connector)

Row A	Row B	Row C	Row D
10.0	10.6	11.8	14.3

Propagation Delay:

Propagation delay in picoseconds (4-row connector)

Row A	Row B	Row C	Row D
159	171	191	221

Skew in picoseconds (4-row connector)

Row A-B	Row B-C	Row C-D
12	20	30

Resistance Per Row: (Signal Contacts)

Row	Resistance in milliohms
A	14
B	16
C	18
D	20
E	22

Single Line Crosstalk -

Near End:

Maximum 5% in any row or column combination per mated signal module

Single Line Crosstalk -

Far End:

Maximum 2.5% per mated signal module

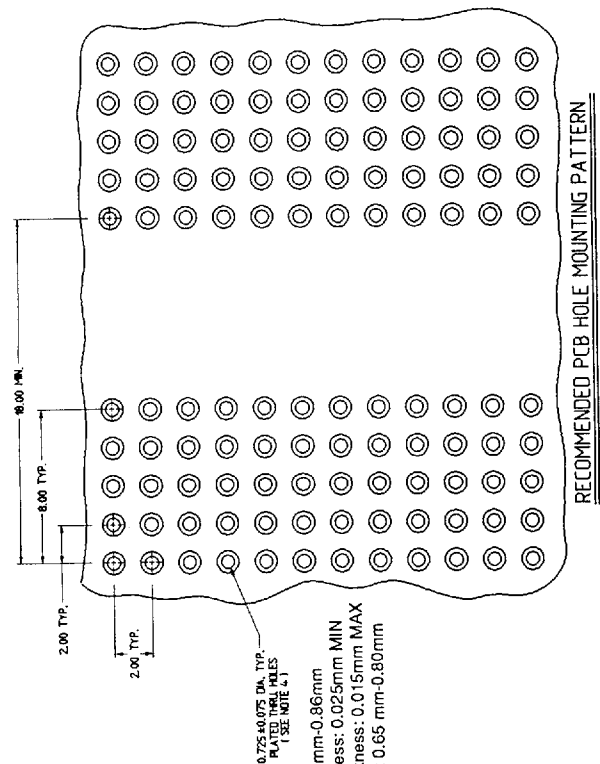
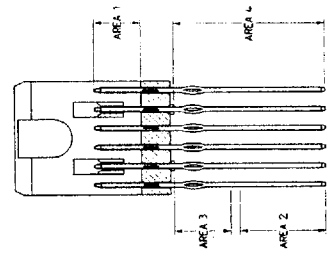
Characteristic Impedance:

Minimum 50 ohms per mated signal module
Maximum 60 ohms per mated signal module when mounted in a 50 Ohm system and excited by a 1 nanosecond risetime step signal. Contacts are allocated in a 3 : 1 S : G ratio.

Note: Electrical performance data have been simulated with a SPICE model for the METPAK 2™ connector. *Current ratings are for benchmarking purposes only, specific current carrying capabilities are system design related. Detailed electrical, mechanical and environmental specifications are available upon request (See Page 251).

DESCRIPTION	DIM "A"	MATING LENGTH			POSITION/GRIDS
		ROW A	ROW B	ROW C	
MP2-H030-51P1-XXXX	11.95	5.00	5.00	5.00	5 x 6
MP2-H030-53P1-XXXX	11.95	6.50	5.75	6.50	5 x 6
MP2-H030-54P1-XXXX	11.95	6.50	6.50	6.50	5 x 12
MP2-H060-51P1-XXXX	23.95	5.00	5.00	5.00	5 x 12
MP2-H060-53P1-XXXX	23.95	6.50	5.75	6.50	5 x 18
MP2-H060-54P1-XXXX	23.95	6.50	6.50	6.50	5 x 18
MP2-H090-51P1-XXXX	35.95	5.00	5.00	5.00	5 x 24
MP2-H090-53P1-XXXX	35.95	6.50	5.75	6.50	5 x 24
MP2-H090-54P1-XXXX	35.95	6.50	6.50	6.50	5 x 30
MP2-H120-51P1-XXXX	47.95	5.00	5.00	5.00	5 x 30
MP2-H120-53P1-XXXX	47.95	6.50	5.75	6.50	5 x 36
MP2-H120-54P1-XXXX	47.95	6.50	6.50	6.50	5 x 36
MP2-H150-51P1-XXXX	59.95	5.00	5.00	5.00	5 x 42
MP2-H150-53P1-XXXX	59.95	6.50	5.75	6.50	5 x 42
MP2-H150-54P1-XXXX	59.95	6.50	6.50	6.50	5 x 48
MP2-H180-51P1-XXXX	71.95	5.00	5.00	5.00	5 x 48
MP2-H180-53P1-XXXX	71.95	6.50	5.75	6.50	5 x 48
MP2-H180-54P1-XXXX	71.95	6.50	6.50	6.50	5 x 48
MP2-H210-51P1-XXXX	83.95	5.00	5.00	5.00	5 x 48
MP2-H210-53P1-XXXX	83.95	6.50	5.75	6.50	5 x 48
MP2-H210-54P1-XXXX	83.95	6.50	6.50	6.50	5 x 48
MP2-H240-51P1-XXXX	95.95	5.00	5.00	5.00	5 x 48
MP2-H240-53P1-XXXX	95.95	6.50	5.75	6.50	5 x 48
MP2-H240-54P1-XXXX	95.95	6.50	6.50	6.50	5 x 48

Plating: TR = .254 μm (10 μinch) ROBEX® min on Area 1
2.54 μm (100 μinch) min. Tin/Lead on Area 4.
TR30 = .762 μm (30 μinch) ROBEX® min. on Area 1.
2.54 μm (100 μinch) min. Tin/Lead on Area 4.
R30 = .762 μm (30 μinch) ROBEX® min. on Areas 1 & 2.
2.54 - 5.08 μm (100-200 μinch) on Area 3.
All Options included a 1.27 μm (50 μinch) Nickel underplate.



Drilled Hole DIA.: 0.81mm-0.86mm
Copper Plating Thickness: 0.025mm MIN
Tin-Lead Plating Thickness: 0.015mm MAX
Hole DIA. after Plating: 0.65 mm-0.80mm

RECOMMENDED PCB HOLE MOUNTING PATTERN

CUSTOMER DRAWING
ALL DIMENSIONS
IN MILLIMETERS

Notes: 1. Application Specific EMLB (early mate/late break) contacts for sequence of ground, power, signal (see Page 346)
2. Press-fit headers require application tooling.
Order MP2-PT-H XXX - 5X [Pin Mating Length
No. of Pins]

Robinson Nugent 812/945-0211 812/945-0805 FAX
METPAK 2™ MP2-HXXX-5XPX-XX (Mate, Signal, Straight, Press-fit, 5-Row Grid)

METPAK 2™