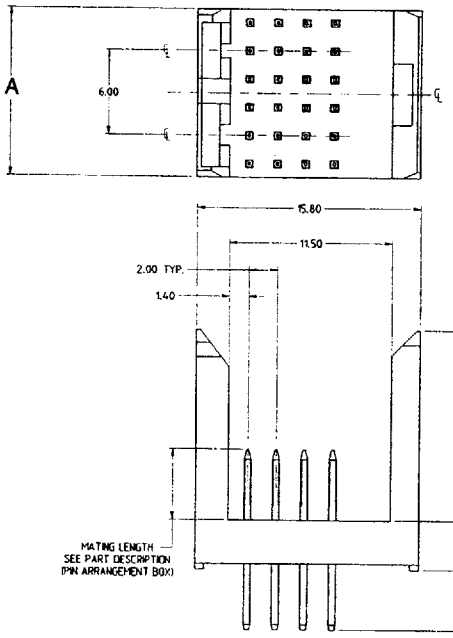
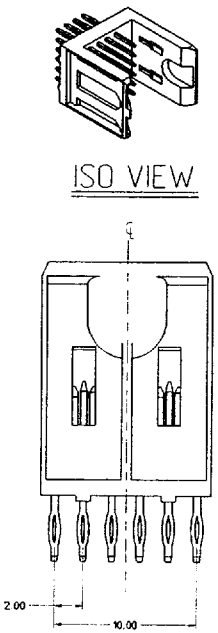
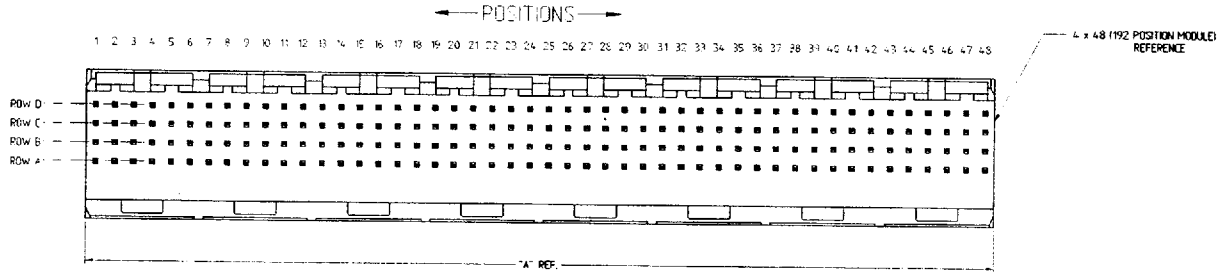




MP2 — H XXX — 4 X P X — XXXX

- MP2 — METPAK 2 Series
- H — Header, Signal Type
- XXX — Number of Positions
  - 024 (4 x 6)
  - 048 (4 x 12)
  - 072 (4 x 18)
  - 096 (4 x 24)
  - 120 (4 x 30)
  - 144 (4 x 36)
  - 168 (4 x 42)
  - 192 (4 x 48)
- 4 — 4 Row Grid
- X — PIN ARRANGEMENT (see table)
- P — Press-Fit Tail Termination
- X — Press-Fit Tail Length
  - *1 = 4.30mm
  - *5 = 13.60mm
  - *7 = 17.00mm
  - *Standard Tail Lengths
- XXXX — Plating: TR, TR30, R30

PIN ARRANGEMENT	MATING LENGTH			
No./Description	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 Arrangement/Mating Lengths. Contact Factory for additional options.				



CUSTOMER DRAWING
ALL DIMENSIONS IN MILLIMETERS

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 socket:
MP-SXXX-4XXX-XX

Robinson Nugent
812/945-0211
812/945-0805 FAX

METPAK 2™ MP2-HXXX-4XPX-XX
(Male, Signal, Straight, Press-fit, 4-Row Grid)

MATERIALS

Housing: High temperature, 30% glass-filled, liquid crystal polymer

Contacts: Standard Header - Phosphor Bronze
Inverse Header - Copper Alloy
Socket - Beryllium Copper

Packaging: Anti-static PVC tubes

Flammability: UL 94V-0

Plating: TR = 10 µinch ROBEX® [7 µinch *(.178 µm)* minimum Palladium Nickel with 3 µinch *(.076 µm)* minimum Gold flash on contact area. 100 µinch *(2.54 µm)* minimum Tin/Lead on terminal area.

TR30 = 30 µinch ROBEX® [27 µinch *(.686 µm)* minimum Palladium Nickel with 3 µinch *(.076 µm)* minimum Gold flash on contact area. 100 µinch *(2.54 µm)* minimum Tin/Lead on terminal area.

All options include an underplate of 50 µinch *(1.27 µm)* minimum Nickel.

MECHANICAL

	Signal Contact	Power Contact
Insertion Force: (average/contact)	33 grams	110 grams
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	—

Agency Approvals
UL #73746

ELECTRICAL

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

Insulation Resistance: (per module) 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).*