

# 3M MetPak™ HSHM Press-Fit Socket Connectors

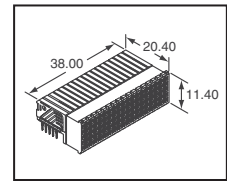


**Features:** • Up to 5 Gb/s data rates • Low crosstalk at high frequencies • 50/100Ω (single ended/differential) impedance • Modular/scalable format IEC 61076-4-101 • 63 mated lines per linear inch • Dual beam contact construction for high reliability • End-to-end stackable with 5 row 3M MetPak CP2, HM and HSHM sockets • Mates with 3M MetPak HSHM headers

**Specifications:** **Insulation:** • Material: High Temperature Thermoplastic (LCP) • Flammability: UL94V-0 **Contact:** • Material: Copper Alloy • Plating: TR30 or TR40B

**Insulation Resistance:** 10<sup>4</sup>MΩ at 100VDC **Current Rating:** 1A at 70°C signal **Withstanding Voltage:** 750 V<sub>RMS</sub> **Temperature Ratings:** -55°C – 125°C

No. of Pos.	High Speed Application	Plating	Digi-Key Part No.	Price Each 1	100	3M Part No.
95	Row	30μ" Gold	3M5655-ND	100.53	76.37	HSHM-S095B1-5AP1-TG30
	Coaxial & Column	30μ" Gold	3M5656-ND	100.53	76.37	HSHM-S095B4-5AP1-TG30
	Row	5μ" Gold	3M5657-ND	92.35	70.16	HSHM-S095B1-5AP1-TR40B
	Coaxial & Column	5μ" Gold	3M5658-ND	100.53	76.37	HSHM-S095B4-5AP1-TR40B



## MetPak™ CP2 Press-Fit Connectors

**Features:** • CompactPCI® combines the benefits of PCI desktop architecture with the ruggedness of the 3U and 6U IEEE Eurocard form factor popularized by the VME bus • Designed according to IEC 61076-4-101 and IEC 917 standards • Meets CPCI application requirements • "Eye of the Needle" compliant pin press-fit design reduces manufacturing time and cost

**Specifications:** **Insulation:** • Material: Glass Filled Polyester (PBT) • Flammability: UL94V-0 **Contact:** • Material: Copper Alloy **Plating:** • Underplate: Nickel • Wiping Area: 30μ" (0.79μm) Gold-MIL-G-45204, Type II • Tail: Tin Lead

**Insulation Resistance:** 10GΩ (Minimum) **Current Ratings:** 1A at 70°C **Test Voltage:** 750VAC (rms) **Temperature Ratings:** -55°C – 125°C

**PCB Data:** • Recommended PCB hole platings: Cu 25-50μm, Sn or SnPb <10μm • PCB Thickness: 1.4 – 5.6mm • Press-In Force: 26 ±6N/pin on nominal hole diameter (0.6 ±0.05mm) • Retention Force: 2.0 ±5N/pin on nominal hole diameter (0.6 ±0.05mm)

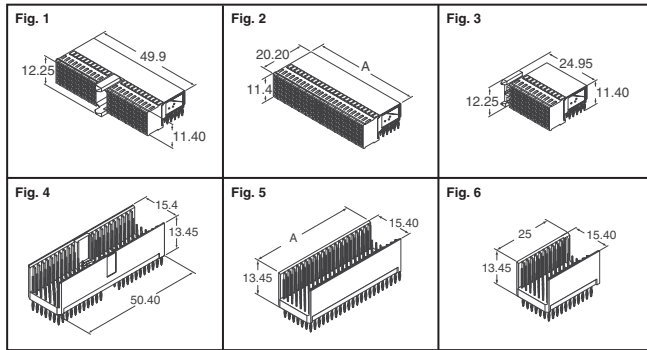


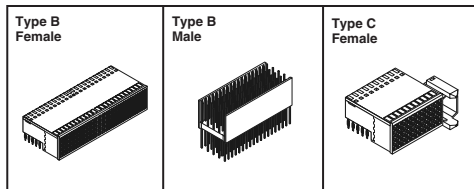
Fig.	No. of Positions	Dimension A (mm)	Digi-Key Part No.	Price Each 1	10	100	3M Part No.
<b>Sockets</b>							
1	110	—	3M5570-ND	4.26	3.59	3.24	CP2-SA110-G1-TG30
2	110	44	3M5571-ND	4.26	3.59	3.24	CP2-SB110-G1-TG30
2	125	50	3M5572-ND	4.78	4.03	3.64	CP2-SB125-G1-TG30
3	55	—	3M5573-ND	2.48	2.09	1.89	CP2-SC055-G1-TG30
<b>Headers</b>							
4	110	—	3M5574-ND	4.78	4.03	3.64	CP2-HA110-GE1-TG30
5	110	44.4	3M5575-ND	4.78	4.03	3.64	CP2-HB110-GE1-TG30
5	125	50.4	3M5576-ND	5.45	4.59	4.14	CP2-HB125-GE1-TG30
6	55	—	3M5577-ND	2.39	2.02	1.82	CP2-HC055-GE1-TG30
<b>Coding Keys for Fig. 1 and 4 (Yellow)</b>							
For 3M5570-ND			3M5578-ND	.35	.30	.27	CP2-K1278-CY-F
For 3M5574-ND			3M5579-ND	.35	.30	.27	CP2-K3456-CY-M
<b>Lower Shields for Sockets</b>							
110 Positions, For 3M5570-ND			3M5580-ND	1.14	.97	.87	CP2-GSA-L
125 Positions, For 3M5572-ND			3M5582-ND	1.14	.97	.87	CP2-GSB25-L
55 Positions, For 3M5573-ND			3M5583-ND	.54	.46	.42	CP2-GSC-L
<b>Shrouds for Headers</b>							
110 Positions, For 3M5574-ND			3M5584-ND	.46	.39	.35	CP2-HSA110-1
110 Positions, For 3M5575-ND			3M5585-ND	.42	.35	.32	CP2-HSB110-2
125 Positions, For 3M5576-ND			3M5586-ND	.52	.44	.40	CP2-HSB125-1
55 Positions, For 3M5577-ND			3M5587-ND	.27	.23	.21	CP2-HSC055-4

## SULLINS Connector Solutions Hard Metric Compact PCI Connectors

Designed for the Telecommunications industry to replace the DIN 41612 Series of 2 piece connectors. It is much higher density than the older 4162 and the IEC Specification allows for greater standardization.

**Specifications:** • Insulator Material: Liquid Crystal Polymer (LCP) UL94V-0 • Contact Material: Phosphor

Bronze • Current Rating: 1 Amp • Dielectric Withstanding Voltage: AC 1000V for 1 Minute • Insulator Resistance: 1000MΩ Min. at DC 500V • Contact Resistance: 30mΩ Maximum at DC 100mA • Operating Temperature: -65°C – 125°C



No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	Sullins Part No.
95	Type B19 Female HM Unshielded	S3105-ND	6.07	5.50	2B19F955F001-0-H
154	Type B22 Male HM CPCI Telephony	S3111-ND	6.89	6.24	2B22M154P1013-1-H
125	Type B25 Female HM Shielded	S3112-ND	9.41	8.52	2B25F1255F001-1-H
125	Type B25 Female HM Unshielded	S3113-ND	7.16	6.48	2B25F1255F001-0-H
175	Type B25 Male HM	S3114-ND	7.02	6.36	2B25M175P1001-1-H
55	Type C Female HM Unshielded	S3115-ND	4.40	3.99	2CF555F001-0-H

## AVX 2mm Hard Metric

**Specifications:** Current Rating: 1.0A/contact/70°C • Voltage Rating: 250V maximum • Dielectric Withstanding Voltage: 750VAC rms/minute • Insulation Resistance: 10<sup>4</sup>MΩ minimum • Contact Resistance: 20mΩ maximum • Operating Temperature: -55°C – 125°C

**Materials:** • Contact and Ground Return Shields: Phosphor Bronze • Insulator and Shroud: PBT 30% Glass filled, UL 94V-0 rated • Code Key: Glass filled polyester, UL 94V-0 rated

**Approvals:** IEC 61076-4-101, GR-1217-CORE, ISO9001 and PICMG

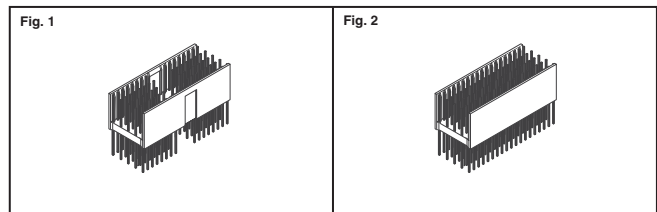


Fig.	No. of Positions	Description	Digi-Key Part No.	Price Each 1	25	100	AVX Part No.
<b>Vertical Male</b>							
1	154	Style A	478-1930-5-ND◆	8.56	7.76	5.50	177200154000002
	100	Style A Computer Telephony	478-1931-5-ND	8.56	7.76	5.50	177200100008002
2	154	Style B	478-1935-5-ND◆	7.16	6.48	4.59	177200154200002

◆ RoHS Compliant

### Coding Keys

Type	Color	Code No.	Voltage	Digi-Key Part No.	Price Each 1	25	100	AVX Part No.
Plug	Yellow	3456	3.3V C-PCI	478-1941-ND	.74	.68	.48	818071000101003
		1567	5.0V C-PCI	478-1942-ND	1.30	1.18	.84	818071000102006
Receptacle	Yellow	1278	3.3V C-PCI	478-1943-ND	.77	.70	.50	828071000101003
		2348	5.0V C-PCI	478-1944-ND	.77	.70	.50	828071000102006

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