

PIN STRIP HEADER (Straight, Dual Insulator)

FEATURES

- Dual insulator design adds mechanical stability
- Custom heights available for unusual board spacing
- MATE-RITE TIP prevents scraping of mating socket
- Insulator standoffs reduce rework due to flux residue
- Mates with Crane's ATP, ATS, ABH, ABS, ABT Series sockets

STANDARD PART DIMENSIONS

MATING		Single Row	Dual Row	Triple Row
P	POST LENGTH	Please refer to the chart on the next page for a wide selection of common board spacing options. Call us if the size you need is not listed.		
I	INSULATOR SPACING			
L	PIN LENGTH			

INSULATOR BODY		Single Row	Dual Row	Triple Row
W	WIDTH	0.096"/2,44mm	0.198"/5,03mm	0.295"/7,49mm
H	HEIGHT	0.098"/2,49mm	0.098"/2,49mm	0.098"/2,49mm
S	STANDOFF	0.015"/0,38mm	0.015"/0,38mm	0.015"/0,38mm

MATERIALS

INSULATOR BODY	Glass Filled Polyester (UL94V-0)
POST	Phosphor Bronze

OPTIONAL HOLD-DOWN PEGS (Ref. Pages 100 - 101)

Crane's PATENTED hold-down pegs (top and bottom entry available) secure part to the PC board preventing misalignment during handling or soldering.

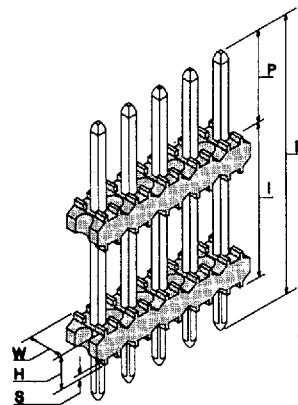


Specifications and Performance Data: Page 104

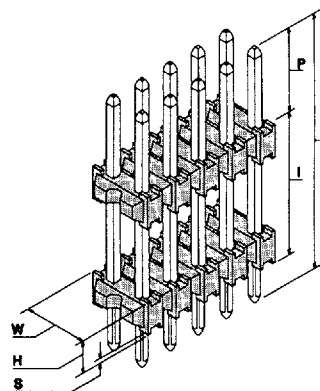
DESIGN NOTE

Insertion forces can really mount up on a high pin count connector... especially if the pin tip geometry is poor. Crane's MATE-RITE-TIP™ reduces the possibility of "drag" when mating by coining the pin tip for the smoothest corners possible, reducing the insertion force needed to mate.

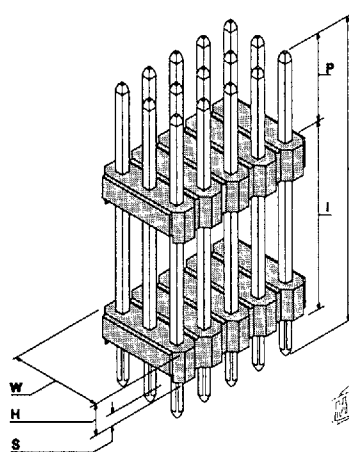
SINGLE ROW (1 to 40 positions)



DUAL ROW (2 to 80 positions)



TRIPLE ROW (9 to 120 positions)



0.100 in. (2,54mm) Centers
0.025 in. (0,64mm) Sq. Mating Posts

HOW TO ORDER CRANE'S MPEG SERIES

STANDARD PART NUMBER

PRODUCT SERIES

MPEG

See note below for insulator options.

TOTAL NUMBER OF POSITIONS

SINGLE	01 - 40
DUAL	02 - 80
TRIPLE	09 - 120

NUMBER OF ROWS

SINGLE	S
DUAL	D
TRIPLE	T

TYPE OF HEADER

STRAIGHT S

PLATING (See Page 106)

CHOOSE G, T or M, H, L, F

Due to the number of options, not all platings are stocked for all lengths. Contact factory for availability.

TAIL

COINED	0.028"/0,71mm	DIAG	R
KINKED	0.028"/0,71mm	DIAG	K
FINE LINE*	0.018"/0,46mm	DIAG	F
SQUARE	0.025"/0,64mm	SQ	Q

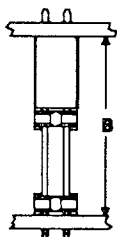
*The FINE LINE option not available in all pin lengths

SELECTED OPTIONS

Many other sizes are available. Please call 1-800-676-7644 and give us your exact requirements.

BOARD-TO-BOARD SPACING ("B" DIM) WHEN USED WITH ATP BOARD MOUNT SOCKET ON PAGE 32

MPEG HEADER MATED WITH ATP SOCKET



	POST LENGTH "P"	INSULATOR SPACING "I"	PIN LENGTH "L"			
	0.125" = H	0.300" = E	0.545" = K	H	E	K
	0.120" = G	0.400" = G	0.640" = N	G	G	N
BOARD-TO-BOARD SPACING ("B" DIM) WHEN USED WITH ATP BOARD MOUNT SOCKET ON PAGE 32	0.125" = H	0.500" = I	0.745" = R	H	I	R
	0.115" = F	0.700" = N	0.935" = X	F	N	X
	0.090" = C	0.900" = Q	1.080" = Y	C	Q	Y
MPEG HEADER MATED WITH ATP SOCKET	0.425"	0.230" = B	0.100" = Z	B	Z	G
	0.500"	0.230" = B	0.175" = B	B	B	J
	0.525"	0.230" = B	0.200" = C	B	C	K
	0.625"	0.230" = B	0.300" = E	B	E	N
	0.750"	0.230" = B	0.425" = H	B	H	R
	0.875"	0.230" = B	0.550" = J	B	J	W
	1.000"	0.230" = B	0.675" = M	B	M	Y
	1.125"	0.170" = N	0.800" = O	N	O	Y
1.225"	0.230" = B	0.900" = Q	B	Q	Z	

INSULATOR NOTE: Standard insulator color is white, except for triple row parts. For a black insulator on single or dual row parts, insert a "B" (BMPEG) at the beginning of the part number. For high temp plastic (black), add a "G" (GMPEG).



Sample Hotline: 1-800-676-7644



Performance Specifications: PIN STRIP HEADERS

PRODUCT SERIES	PEG	TPEG	MPEG	FMPEG	DPEG	GPEG	GMPEG	LPEG	PLS PLT	MPLS MPLT	PGM	MPGM	DPGM	LPGM	PFF PFH	MPFF MPFH	PLF PLH	MPLF MPLH				
PAGES	8-9 22-23 24-25	10-11	12-13 28-29	14-15	16-17	18-19 30-31	20-21	26-27	32-33	34-35	56-57 62-63 66-67	58-59 64-65	60-61	68-69	76-77 84-85 86-87	78-79 88-89	80-81	82-83 90-91				
INSULATOR MATERIAL	Glass Filled (GF) Polyester										High Temp Thermoplastic		High Temp Thermoplastic									
TEMPERATURE RANGE	-55C to +125C										-65C to +220C		-65C to +220C									
FLAMMABILITY RATING	All Crane Connector Products Are Rated At UL 94V-0																					
CONTACT MATERIAL	Phosphor Bronze																					
PLATING OPTIONS	G,T, or M,H,L,F										G,T, or H,L,F		G,F or T									
INSULATION RESISTANCE	50,000 Megohms										50,000 Megohms		N/A		5,000 Megohms							
DWV (DIELECTRIC WITHSTANDING)	1500 VAC RMS										1500 VAC RMS		N/A		650 VAC RMS		650 VAC RMS					
CURRENT RATING	3 AMPS										3 AMPS		1 AMP		1 AMP							

Recommended Plated Thru Hole Sizes - PIN STRIP HEADERS

PIN SIZE	DIA / DIAG	HOLE SIZE	USED ON
0.025" Square	0.034"	0.040" +/- 0.003"	PEG / MPEP / GPEG / TPEG / LPEG / FMPEG
0.025" Coined	0.030"	0.038" +/- 0.003"	PEG / MPEP / GPEG / TPEG / LPEG / FMPEG
0.025" Coined	0.030"	0.032" +/- 0.002"	DPEG
0.025" Fine Line	0.018"	0.023" +/- 0.003"	PEG / MPEP / GPEG / TPEG / LPEG / FMPEG
0.020" Square	0.025"	0.032" +/- 0.003"	PGM / MPGM / DPGM / LPGM
0.020" Rounded	0.020"	0.025" +/- 0.003"	PFF / PFH / MPFF / MPFH
0.018" Square	0.023"	0.030" +/- 0.003"	PFF / PFH / MPFF / MPFH
0.018" Round	0.018"	0.023" +/- 0.003"	PFF / PFH / MPFF / MPFH

Recommended Plated Thru Hole Sizes - BOARD MOUNT SOCKETS

PIN SIZE	HOLE SIZE	USED ON
0.030" x 0.016"	0.040" +/- 0.003"	ATP / ATL / MATP / MATL / ATS / ATT / GATT
0.028" x 0.009"	0.035" +/- 0.003"	ABS / ABH / BBP
0.031" x 0.011"	0.040" +/- 0.003"	ABT/BBP
0.020" x 0.008"	0.028" +/- 0.003"	ATM
0.025" x 0.025" SQ	0.040" +/- 0.003"	ATP / ATL / MATP / MATL

PERFORMANCE / TEST SPECIFICATIONS

QUALITY		CONTACTS	
Quality Program Requirements	ISO 9001	Material Specifications	
Military Specifications - Connectors	MIL-C-55302D	Phosphor Bronze	QQ-B-750/ASTM B159
Sampling Procedures and Tables for Inspection	MIL-STD-105	Copper and Copper Alloy 770	ASTM B122
Quality Assurance Terms and Conditions	MIL-STD-109	General Specifications	
Calibration Systems Requirements	MIL-STD-45662A	General Specifications for Contacts	MIL-C-39029D
Inspection System Requirements	MIL-I-45208A	POSTS	
INSULATOR		Wire, Phosphor Bronze	QQ-B-750/ASTM B159
Plastic Material Specification		PLATING	
Molding Plastics, Polyester, Thermoplastic	MIL-M-24519	Outer Plating Specifications	
Tests For Flammability	UL94V-O	Gold - Type II, Grade C	MIL-G-45204
UL Temperature Index	UL746B	Tin/Lead	MIL-P-81728A
Limiting Oxygen Index	ASTM D2863	Under Plating Specifications	
Plastic Material Applied Tests		Nickel	QQ-N-290
Dielectric Strength, Short Term	ASTM D149	Copper	MIL-C-14550
Dielectric, Constant	ASTM D150	Palladium Nickel	MIL-P-45209
Izod Impact Strength	ASTM D256	Plating Applied Tests	
DC Resistance (Volume Resistivity)	ASTM D257	Coating Thickness (X-Ray Fluorescence)	ASTM-A-754-79
Arc Resistance	ASTM D495	ASSEMBLY	
Water Absorption	ASTM D570	Testing Specifications	
Test for Tensile Strength	ASTM D638	Test Methods for Electrical Connectors	MIL-STD-1344A
Heat Deflection Temperature	ASTM D648	Test Methods for Electrical and Electronic Components	MIL-STD-202
Compressive Strength	ASTM D695	Connections, Electrical, Solderless, Wrapped	MIL-STD-1130B
Coefficient of Linear Thermal Expansion	ASTM D696	Environmental Test Methods	MIL-STD-810
Shear Strength of Plastics	ASTM D732	Packaging Specifications	
Rockwell Hardness R-scale	ASTM D785	Connector, Preparations For Delivery Of	MIL-C-55330
Flexural Strength of Plastics	ASTM D790	Marking of Electronic Parts	MIL-STD-1285B
Specific Gravity and Density of Plastics	ASTM D792	Marking for Shipment and Storage	MIL-STD-129
Mold Shrinkage Flow	ASTM D995	Identification Marking of US Military Property	MIL-STD-130
Outgassing Test	ASTM E-595-84	Bar Coding Symbology	MIL-STD-11898

Crane uses the above test methods in full or in part to determine compliance of its parts and materials to internal and customer supplied specifications.



PLATING SPECIFICATIONS	CONTACT AREA Inches (Millimeters)	PC TAIL Inches (Millimeters)	UNDERPLATE Inches (Millimeters)
G Selective	15μ*(0,00038) gold	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.
T Tin/Lead	100μ*(0,00254) tin/lead	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.
M Selective	50μ*(0,00127) gold	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.
H Selective	30μ*(0,00076) gold	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.
L Selective	10μ*(0,00025) gold	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.
F Selective	3μ*(0,00008) gold	100μ*(0,00254) tin/lead - min.	50μ*(0,00127) nickel - min.

The following names and symbols used in this catalog are trademarks of Crane Electronics, Inc.

Crane Electronics®
Crane Connectors™
Mate-Rite Tip™



STANDARD TAIL OPTIONS ON .100" PIN STRIP HEADERS			
R	K	F	Q
COINED	KINKED	FINE LINE	SQUARE
The standard "R" option provides a coined tail improving solder action while making insertion easier.	The "K" option provides a kinked tail, reducing unwanted movement on the PC Board.	The "F" option combines an 0.018" rounded tail with an 0.025" square post. The fine line feature allows more traces between holes.	The "Q" option provides a 0.025" square tail for use in wire wrap applications.

STANDARDS	
 UL File No. E120111 (N)	ISO 9001  Crane Connectors File No. A-3620
Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories Inc.	Registered by UL to ISO9001 under UL's accreditation by Raad voor de Certificatie (RvC), the Dutch Council for Certification.