

BOARD MOUNT SOCKET (Rectangular Tail, Elevated)

FEATURES

- Chamfered entry prevents pin stubbing
- High reliability tuning fork contact
- Standoffs reduce rework due to flux residue
- Selective plating options available
- Mates with PEG, MPEG, DPEG, LPEG, TPEG headers

STANDARD PART DIMENSIONS

INSULATOR BODY (TOP)		Single Row	Dual Row
W1	WIDTH	0.100"/2,54mm	0.200"/5,08mm
H1	HEIGHT	0.325"/8,25mm	0.325"/8,25mm

INSULATOR BODY (BOTTOM)		Single Row	Dual Row
W2	WIDTH	0.096"/2,44mm	0.198"/5,03mm
H2	HEIGHT	0.098"/2,49mm	0.098"/2,49mm
S	STANDOFF	0.015"/0,38mm	0.015"/0,38mm

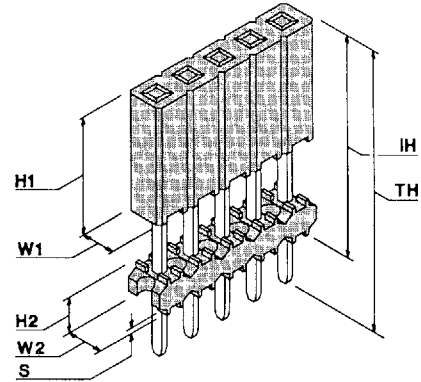
OVERALL HEIGHT		Single Row	Dual Row
TH	TOTAL	Please refer to chart on the next page	
IH	INSTALLED		

MATERIALS

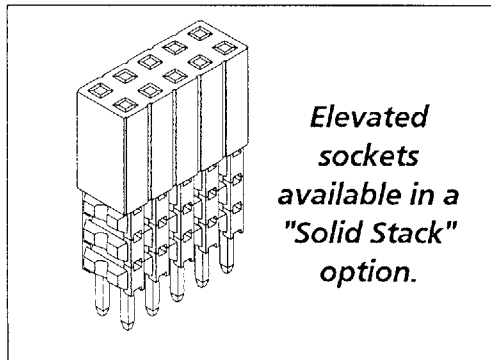
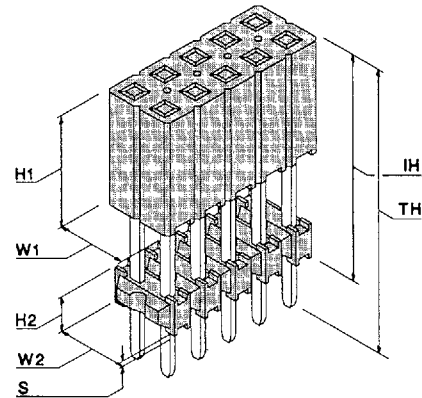
INSULATOR BODY	Glass Filled Polyester (UL94V-0)
CONTACT	Phosphor Bronze

Specifications and Performance Data: Page 105

SINGLE ROW (1 to 36 positions)



DUAL ROW (2 to 72 positions)



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

HOW TO ORDER CRANE'S MATP/MATL SERIES

STANDARD PART NUMBER

PRODUCT SERIES

HIGH TEMP VERSION

MAT

GMAT



CONTACT

(NOTE: LIF not available with tin plating)

STANDARD

P

LIF

L

NUMBER OF POSITIONS

SINGLE

01 - 36

DUAL

02 - 72



NUMBER OF ROWS

SINGLE

S

DUAL

D



TYPE OF SOCKET

STRAIGHT

S



PLATING (See Page 106)

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

(Tin plating is not available on LIF sockets)

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



TAIL

RECTANGULAR

0.016"/0,41mm x

R

KINKED

0.030"/0,76mm

K



INSULATOR SPACERS

SOLID STACK

A

SINGLE INSULATOR AT BOTTOM

B

SELECTED OPTIONS

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

INSTALLED HEIGHT "B" DIM

TOTAL HEIGHT "D" DIM



0.400" = B

0.525" = F

B

F

0.435" = C

0.525" = F

C

F

0.435" = C

0.725" = N

C

N

0.435" = C

0.915" = T

C

T

0.500" = G

0.725" = N

G

N

0.535" = H

0.725" = N

H

N

0.535" = H

0.915" = T

H

T

0.600" = L

0.725" = N

L

N

0.635" = M

0.725" = N

M

N

0.635" = M

0.915" = T

M

T

0.700" = Q

0.915" = T

Q

T

0.735" = R

0.915" = T

R

T

0.800" = V

0.915" = T

V

T

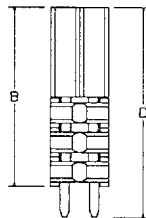
0.835" = W

0.915" = T

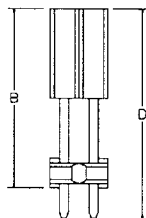
W

T

Crane's MATP Series can be used with our MPEG Series for ultra-high board stacking needs. Refer to pages 12 - 13.



TYPE A



TYPE B



Sample Hotline: 1-800-676-7644



Performance Specifications: BOARD MOUNT SOCKETS / PROGRAMMING JUMBERS

PRODUCT SERIES	ATP	ATL	MATP	MATL	ATS	ABS	ABT	ABH	BBP	GATT	ATT	ATM	AFF	ATF	LCC	SOJ	JUN	JNM			
PAGES	36 - 37	36 - 37	38 - 39 40 - 41	38 - 39 40 - 41	42 - 43	44 - 45	44 - 45	52 - 53	46 - 47	50 - 51	48 - 49	70 - 71 72 - 73	92 - 93	94 - 95	96 - 97	98 - 99	54 - 55	74 - 75			
INSULATOR MATERIAL	Glass Filled (GF) Polyester																				
TEMPERATURE RANGE	-55C to +125C									-65C to +220C						-40C to 105C					
FLAMMABILITY RATING	All Crane Connector Products Are Rated at UL 94V-0																				
CONTACT MATERIAL	Copper Alloy 770			Phosphor Bronze			Phosphor Bronze			CA770			Phosphor Bronze								
PLATING OPTIONS	G,T or M,H,L,F			G,T or H, F			G,T or M,H,L,F			G, F or H			Tin			G,T, or H,F					
INSULATION RESISTANCE	5000 Megohms Minimum																				
DWV (DIELECTRIC WITHSTANDING)	1000 VAC RMS																				
CURRENT RATING	1 AMP																				
CONTACT RESISTANCE	<10 Milliohms			<20 Milliohms			<10 Milliohms			<20 Milliohms											
LEAD INSERTION DEPTH	NOM			MIN			MAX			N/A			N/A			N/A					
INSERTION FORCE	5.0 oz. avg			2.5 oz. avg			5.0 oz. avg			3.5 oz. avg			6.0 oz. avg			2.5 oz. avg			1.5 oz. avg		
WITHDRAWAL FORCE	3.0 oz. avg			1.5 oz. avg			3.0 oz. avg			2.5 oz. avg			6.0 oz. avg			2.0 oz. avg			2.5 oz. avg		

More detailed reports performed by outside test laboratories are available for a variety of products. Please contact Crane for more information if needed.

ENGINEERING NOTE:

The information presented in this catalog is accurate to the best of our knowledge. Due to ongoing efforts to advance design and material performance, the information is subject to change without notice.

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.