SPECIAL HERMETIC PRODUCTS, INC.

Hi-Rel By Design

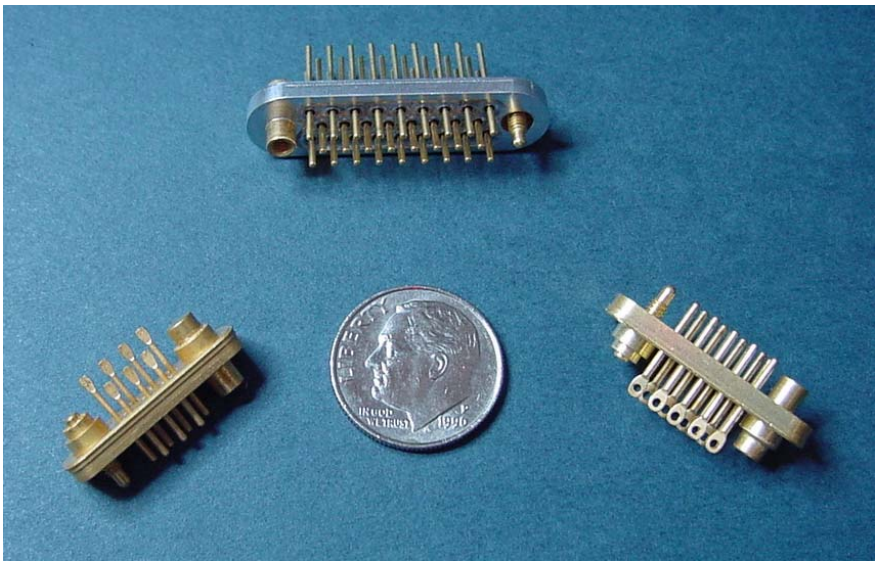
39 Souhegan Street - P.O. Box 269, Wilton, New Hampshire 03086

TEL (603) 654-2002 FAX (603) 654-2533

email: sales@shp-seals.com - website: www.shp-seals.com

HERMETIC MICRO-MINIATURE CONNECTORS

PATENTED
Canada Patent No. 1,318,371



ALUMINUM COMPATIBLE
SOLDERABLE AND WELDABLE PER MIL-DTL-28748/7
(MATES WITH MIL-DTL-28748/8)

These "aluminum compatible" connectors utilize special construction features which facilitate reliable hermetic performance in rigorous thermal cyclic environments.

The Solderable connectors utilize high expansion materials as well as unique interface design which in combination reduces solder strain by a minimum of 90%. This low strain assures a long reliable cyclic life for the solder joints.

In the weldable case the body is constructed of a material with matching CTE to the host housing essentially eliminating strain in the weld.

For solderable micro-miniature connectors, see pages 2 and 3.

For weldable micro-miniature connectors, contact SHP.

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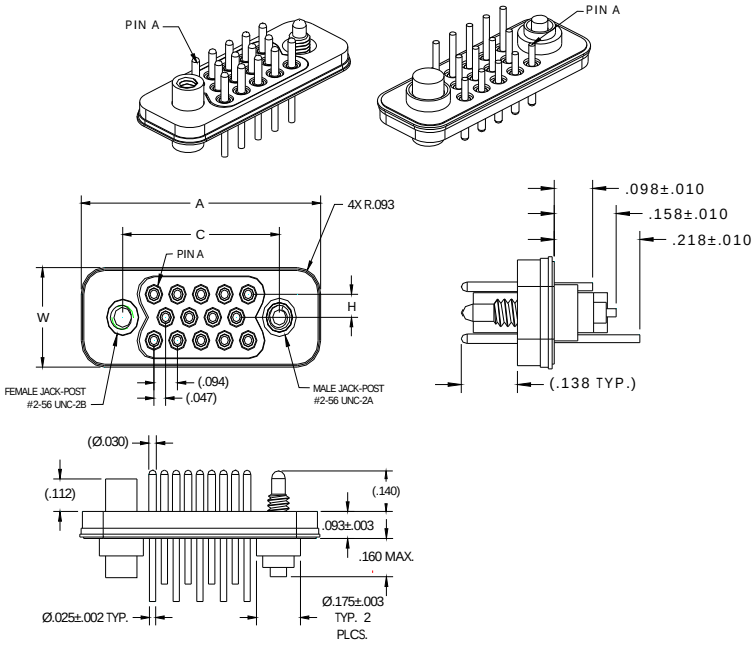
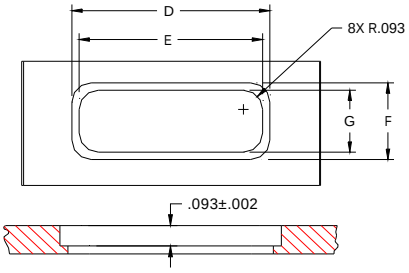


RECOMMENDED INSTALLATION



ALUMINUM COMPATIBLE SOLDERABLE

Type: HMMHE per MIL-DTL-28748/7
(Mates with MIL-DTL-28748/8)
No. of Contacts: 5, 7, 9, 11, 14, 20, 26, 29, 34, 44

DESCRIPTION

This hermetic micro-miniature connector series is designed specifically for use in aluminum housings for severe military temperature environments. Connectors in this series provide compatibility with plugs per MIL-DTL-28748/8. Unlike other connectors made of various steels, these are made of a higher-expansion material which possesses a coefficient of thermal expansion close to that of aluminum. This feature, coupled with a unique geometry which facilitates optimum solder joints and insures reliable hermeticity of the installed connector.

SPECIFICATION

Body - Brass
Insulation - Glass
Contacts - Steel
Plating - 50 microinches minimum GOLD per MIL-G-45204, Type III, Grade A over 200-300 micro-inches Electroless NICKEL per MIL-C-26074.
Contact Diameter - .030
Mounting Hardware - Stainless Steel
Leak Rate - Less than 1 X 10^{-8} cc/sec @ 1atm (He)
Max Operating Process Temperature - 200°C
Contact Rating - 3 AMPS
Voltage Breakdown - 500 VAC

CONNECTOR DIMENSIONS

DIMENSIONS	5P	7P	9P	11P	14P	20P	26P	29P	34P	44P
A ±.002	.770	.860	.950	.860	.955	1.142	1.330	1.424	1.330	1.580
W ±.002	.270	.270	.270	.350	.350	.350	.350	.350	.460	.460
C Ref	.468	.562	.656	.532	.625	.814	1.000	1.094	1.032	1.281
H Ref	.081	.081	.081	.081	.081	.081	.081	.081	.090	.090
Rows	2	2	2	3	3	3	3	3	4	4
INSTALLATION DIMENSIONS										
D ±.001	.774	.864	.954	.864	.959	1.146	1.334	1.428	1.334	1.584
E ±.002	.700	.790	.880	.790	.885	1.072	1.260	1.354	1.260	1.510
F ±.001	.274	.274	.274	.354	.354	.354	.354	.354	.464	.464
G ±.002	.220	.220	.220	.300	.300	.300	.300	.300	.410	.410

NOTE: For part number configuration, see page 3.

All dimensions are inches.

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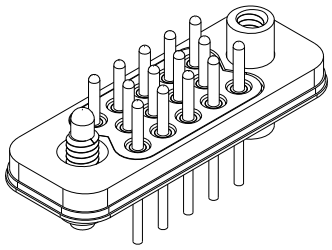

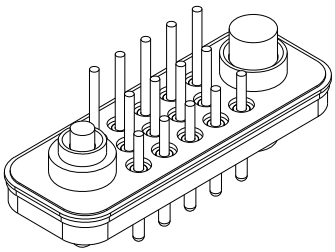

	TERMINATION/CONFIGURATION CODES							
	Uniform			Staggered				
	2 & 3 Rows			2 Rows		3 Rows		
	STANDARD PIN LENGTHS ±.010							
	.098	.158	.218	.098, .158	.158, .218	.098, .158, .158	.098, .158, .218	.158, .218, .218
Straight Cut	110	120	130	111	113	115	117	119
Flattened	210	220	230	211	213	215	217	219
Flat & Pierce	310	320	330	311	313	315	317	319

Example Part No: HMMHE-14P-215

PART NUMBER

HMMHE-xP-xxx(R)

SERIES

NO. OF CONTACTS
5, 7, 9, 11, 14, 20, 26, 29, 34, 44

TERMINATION/CONFIGURATION CODE
See data above(1)

REVERSE CONFIGURATION
(JACK SCREW POSITIONS)

Notes: (1) Other lead lengths available
(2) Contact SHP for solder preforms.

All dimensions are inches.