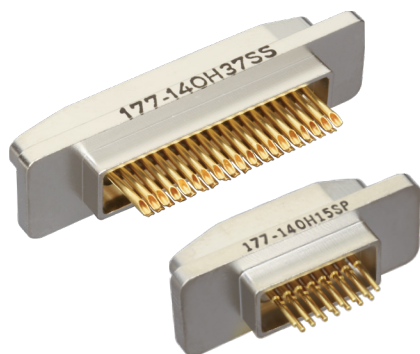




Micro-D MIL-DTL-83513 Type Hermetic Connectors

177-140H Solder Cup or PC Tail or 177-704H Insulated Wire Receptacles Solder Mount



**MATES
WITH
All** **83513**
Pin
Connectors

Micro-D hermetic connectors feature Kovar® alloy shells, in compliance with applicable MIL-DTL-83513 space requirements, and a matched glass-to-metal seal. Helium leak rate is 1×10^{-7} cc's per second. Connectors are 100% intermateable with standard connectors. 177-140H connectors are available with solder cup contacts, PC tails. 177-704H connectors come pre-wired and epoxy-sealed. Socket contacts are Kovar® alloy with gold plating. These connectors are designed for panel mounting and can be front- or rear-panel mounted. Installation requires soldering to the panel.

Part Number Development

Sample Part Number	177-140H	31	SS
Series	177-140H Hermetic Micro-D		
Contact Layout	9, 15, 21, 25, 31, 37, 51, 51-2, 69, 75, 100, 130 (Table I)		
Termination Type	SS - Solder Cup, Socket SP - PC Tail, Socket		

Notes

1. Use of Threaded helical coil insert manufacturers option
2. Glenair's 177-140 hermetic socket connector mates with all standard MIL-DTL-83513 pin connectors (MWDM series).
3. Connector may be back potted

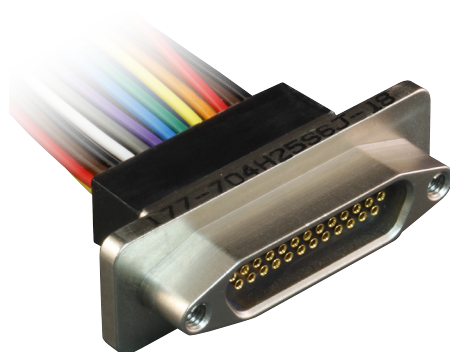
Performance:

- Hermeticity 1×10^{-6} scche/sec @ 1 atmosphere differential
- Dielectric withstanding voltage: sea level 150 VAC
- Insulation resistance: 5000 megohms min.

Material/finish

- Shell: kovar alloy/electro-deposited nickel
- Socket contacts: Kovar® alloy/ gold plate
- Insulator: fullglass
- Interfacial seal, o-ring: fluorosilicone

H



**MATES
WITH
All** **83513**
Pin
Connectors

Part Number Development

Sample Part Number	177-704H	25	S	6	J	7	-18
Series	177-704H Hermetic Micro-D with Insulated Wire						
Contact Layout	9, 15, 21, 25, 31, 37, 51, 51-2, 100, 130; (See Table I)						
Contact Type	S - Socket Contacts, Pre-Wired						
Wire Gage (AWG)	6 - 26 8 - #28 0 - #30						
Wire Type	K - M22759/11 600 Vrms Fluoropolymer (TFE) (Not Available in #30 AWG) J - M22759/33 600 Vrms Modified Cross-Linked Tefzel® (ETFE)						
Wire Color	1 - White 2 - Yellow 5 - Color-Coded Stripes Per MIL-STD-681 (#26 gage only) 7 - Ten Color Repeat						
Wire Length Inches	18 - Wire Length In Inches. "18" Specifies 18 Inches.						

Notes

1. Glenair 177-704 hermetic socket connector mates with all standard MIL-DTL-83513 pin connectors (MWDM series).
2. Connector may be back potted.
3. Use threaded helical coil insert manufactures option.

Performance:

- Hermeticity 1×10^{-6} scche/sec @ 1 atmosphere differential
- Dielectric withstanding voltage: sea level 150 vac
- Insulation resistance: 5000 megohms min.

Material/finish

- Shell: Kovar® alloy/electro-deposited nickel
- Socket contacts: Kovar® alloy/ gold plate
- Insulator: borosilicate glass
- Interfacial seal, o-ring: fluorosilicone/n.a.
- Potting: epoxy

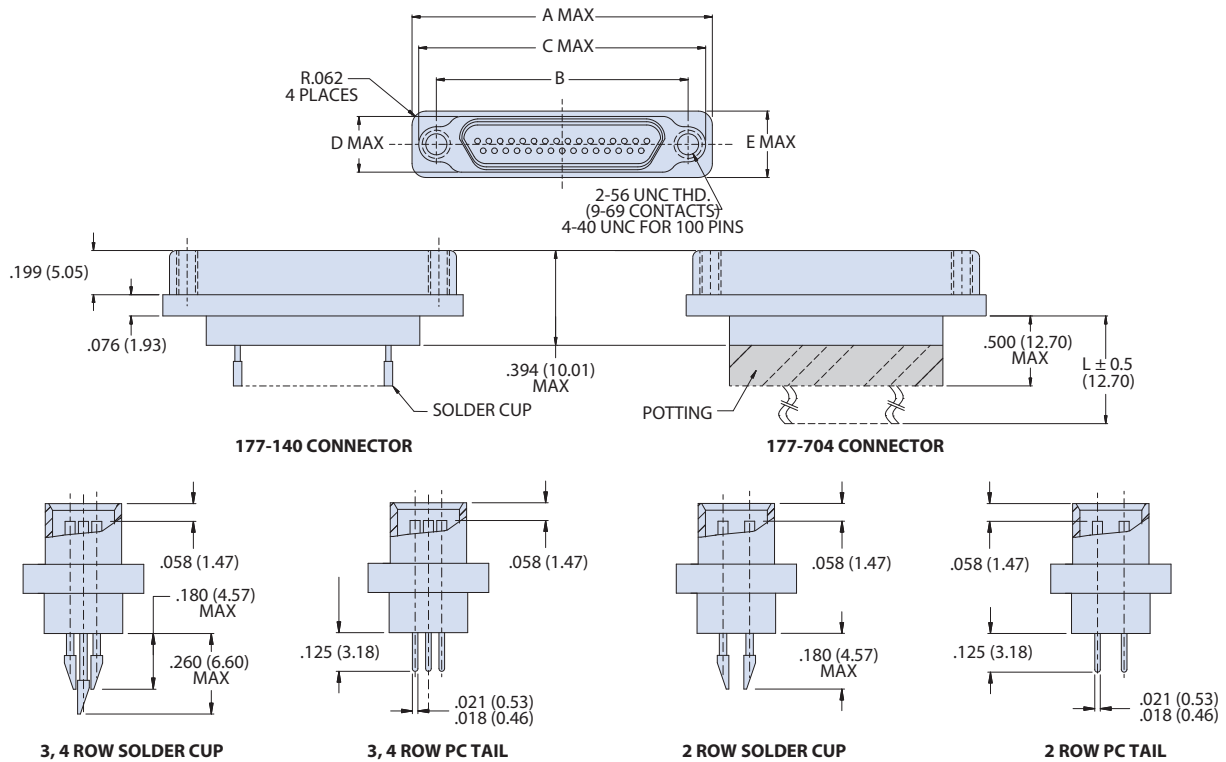
Micro-D MIL-DTL-83513 Type Hermetic Connectors

177-140H Solder Cup or PC Tail or
177-704H Insulated Wire Receptacles
Solder Mount



Micro-D
Hermetic

Table I: Dimensions



H

Layout	A Max.		B		C MAX.		D Max.		E Max.		F		G Max.	
	In.	mm.	In. ± .005	mm. ± 0.13	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
9S	.785	19.94	.565	14.35	.695	14.35	.250	6.35	.310	7.87	.410/.405	10.41/10.29	.280/.275	7.11/6.99
15S	1.030	26.16	.715	18.16	.855	21.71	.250	6.35	.425	10.80	.550/.545	13.97/13.84	.270/.265	6.86/6.73
21S	1.180	29.97	.865	21.97	1.005	25.53	.250	6.35	.425	10.80	.765/.760	19.43/19.30	.270/.265	6.86/6.73
25S	1.280	32.51	.965	24.51	1.105	28.06	.250	6.35	.425	10.80	.800/.795	20.32/20.19	.270/.265	6.86/6.73
31S	1.430	36.32	1.115	28.32	1.255	31.88	.250	6.35	.425	10.80	.950/.945	24.13/24.00	.270/.265	6.86/6.73
37S	1.580	40.13	1.265	32.13	1.425	36.20	.250	6.35	.425	10.80	1.100/1.095	27.94/27.81	.270/.265	6.86/6.73
51-2S	1.930	49.02	1.615	45.08	1.775	45.09	.250	6.35	.425	10.80	1.450/1.445	36.83/36.70	.270/.265	6.86/6.73
51S	1.530	38.86	1.215	30.86	1.361	34.57	.310	7.87	.468	11.89	1.045/1.040	26.54/26.42	.310/.305	7.87/7.75
69S	1.530	38.86	1.515	38.48	1.685	1.855	.320	1.855	.468	1.855	1.415/1.410	35.94/35.81	.310/.305	7.87/7.75
75S	2.045	51.94	1.705	43.31	1.875	47.63	.320	1.855	.468	1.855	1.515/1.510	38.48/38.35	.310/.305	7.87/7.75
100S	2.260	57.40	1.800	45.72	2.010	51.05	.330	8.38	.517	13.13	1.780/1.775	45.21/45.09	.370/.365	9.40/9.27
130S	2.600	57.40	2.150	54.61	2.350	59.69	.330	8.38	.517	13.13	2.640/2.635	67.06/66.93	.370/.365	9.40/9.27

TABLE II									
Size	F Dim		G Dim		Size	F Dim		G Dim	
	in	mm	in	mm		in	mm	in	mm
9	.410/.405	10.41/10.29	.280/.275	7.11/ 6.99	37	1.100/1.095	27.94/ 27.81	.270/.265	6.86/ 6.73
15	.550/.545	13.97/13.84	.270/.265	6.86/ 6.73	51	1.045/1.040	26.54/ 26.42	.310/.305	7.87/ 7.75
21	.765/.760	20.32/20.19	.270/.265	6.86/6.73	51-2*	1.450/1.445	36.83/ 36.70	.270/.265	6.86/ 6.73
25	.800/.795	20.32/20.19	.270/.265	6.86/ 6.73	100	1.780/1.775	45.21/45.09	.370/.365	9.40/ 9.271
31	.950/.945	24.13/ 24.00	.270/.265	6.86/ 6.73	* Dimensions to-be-determined for 177-704				

