

SPECIAL HERMETIC PRODUCTS, INC.

Hi-Rel By Design

BULLETIN# 510, Rev. D PAGE# 1 of 5

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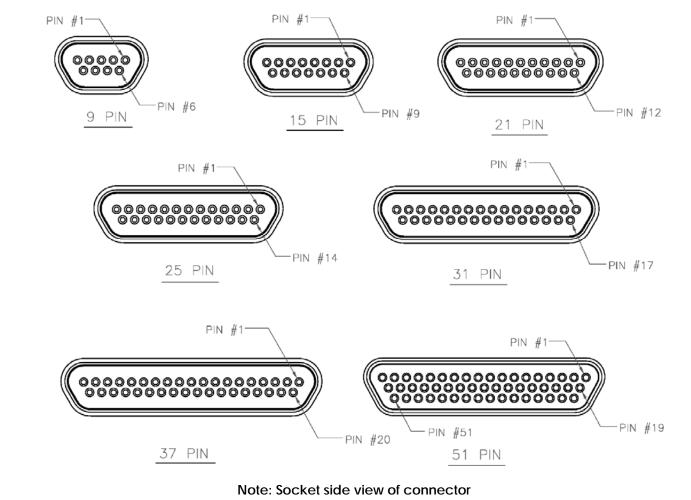
HERMETIC MICRO D CONNECTORS



Our patented design is based on the same principles as our popular "aluminum compatible" feedthrus which have provided unparalleled reliability in rugged thermal environments for two decades. They are available in a number of configurations, materials and finishes for compatibility with various housing materials, mating connectors and attachment methods. US Patent# 6,821,145.

SPECIFICATION	SOLDERABLE & LASER WELDABLE		
Temperature	-65°C - +200°C		
DWV (Pin to Ground)	350 Vdc @ S.L.		
Contact Rating	3 Amps		
Leak Rate	Less than 1 X 10-8 std. cc/sec. at 1 ATM (He)		
Mechanical	Interface per MIL-PRF-83513		







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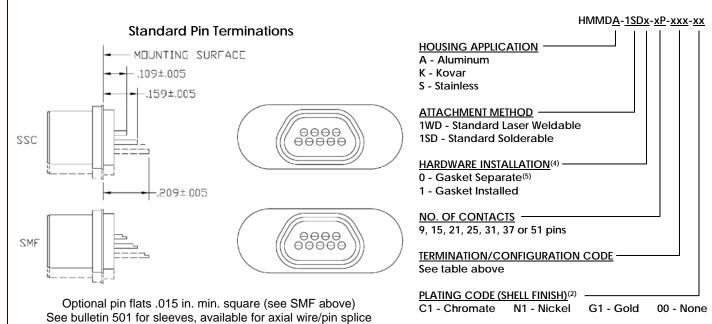
HERMETIC MICRO D CONNECTORS

HOUSING APPLICATION	ATTACHMENT METHOD	Part Number	NO. OF CONTACTS	CONNECTOR BODY MATERIAL	SHELL Finish ⁽²⁾
A I I I I A I A I I I I A	Laser Weld	HMMDA-1WDx-xP-xxx-xx		4047	CHROMATE
ALUMINUM Solder ⁽³⁾	HMMDA-1SDx-xP-xxx-xx		6061	NICKEL or GOLD	
ASTIVI-FTS ESSE	Laser Weld	HMMDK-1WDx-xP-xxx-xx	9, 15, 21,	ASTM-F15 (KOVAR)	NICKEL
	Solder ⁽³⁾	HMMDK-1SDx-xP-xxx-xx	25, 31, 37, 51		GOLD
STAINLESS STEEL	Laser Weld	HMMDS-1WDx-xP-xxx-xx		304L	NICKEL or NONE
	Solder(3)	HMMDS-1SDx-xP-xxx-xx		303	NICKEL or GOLD

		TERMINATION/CONFIGURATION CODES							
Uniform 2 & 3 Rows			Stagge Ro	ered 2 ws	Staggered 3 Rows		WS		
	Pin Length In.(1)	.109	.159	.209	.109, .159	.159, .209	.109, .159, .159	.109, .159, .209	.159, .209, .209
TERM.	Straight Cut	110	120	130	SSC	113	115	SSC	119
CODE	Machined Flat		NA		SMF	213	NA	SMF	NA

Example Part No: HMMDA-1SD1-21P-130-G1 = 21 Pin connector

PART NUMBER



Notes: (1) These lengths are standard, other lengths and combinations are available.

- (2) Contact SHP for other plating options.
- (3) See bulletin 210 for solder preforms.
- (4) Connectors can ship with or without gasket installed. Please specify.
- (5) Contact SHP for gasket installation tool.

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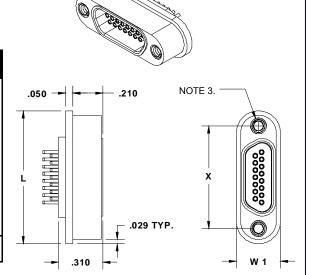
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PATENTED US Patent# 6,821,145

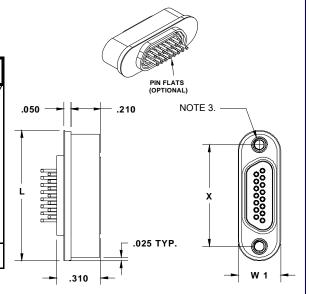
WELDABLE

PINS	Rows	X ±.002	L ±.002	W1 ±.002
9	2	.565	.775	
15	2	.715	.925	
21	2	.865	1.075	207
25	2	.965	1.175	.307
31	2	1.115	1.325	
37	2	1.265	1.475	
51	3	1.215	1.425	.350



SOLDERABLE

PINS	Rows	X ±.002	L ±.002	W1 ±.002
9	2	.565	.767	
15	2	.715	.917	/
21	2	.865	1.067	.299
25	2	.965	1.167	.299
31	2	1.115	1.317	
37	2	1.265	1.467	
51	3	1.215	1.417	.342



NOTES: (1) Dimension 'X' per MIL-PRF-83513 (metal Shell Connectors).

- (2) See Page 2 of Bulletin for Part No. construction.
- (3) Stainless steel thread inserts on aluminum housings; others threaded.
- (4) 51-pin connector has 3 rows of pins per MIL-PRF-83513.

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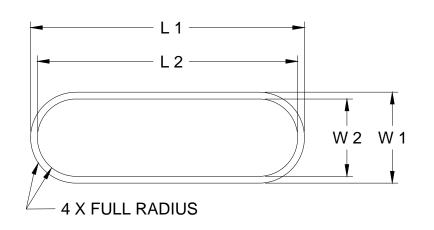
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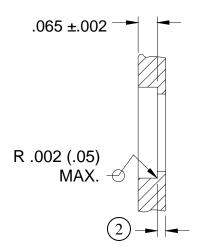
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SOLDER APPLICATION





PINS	L1 ±.001	L2 ±.002	W1 ±.001	W2 ±.002
9	.771	.738		
15	.921	.888		
21	1.071	1.038	202	270
25	1.171	1.138	.303	.270
31	1.321	1.288		
37	1.471	1.438		
51	1.421	1.388	.346	.313

- (1) Tolerances are ±.001 unless otherwise specified.
- (2) This dimension should provide minimal support to connector and sufficient pin protrusion into housing cavity. For thick walls, longer pin lengths are available.

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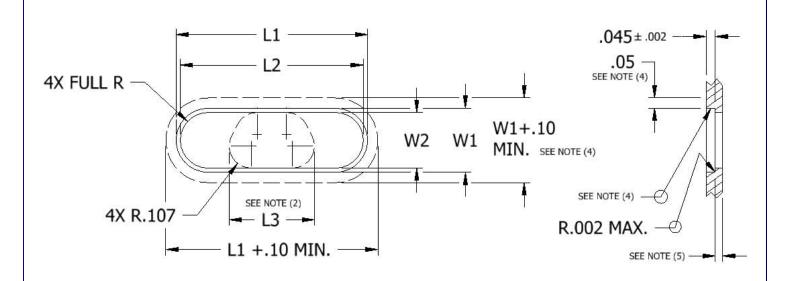
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LASER WELD APPLICATION



PINS	L1 ±.001	L2 ±.002 ^③	L3 ±.002 ^②	W1 ±.001	W2 ±.002 ^③
9	.779	.738	.414	/	/
15	.929	.888	.554		.270
21	1.079	1.038	.714	244	
25	1.179	1.138	.814	.311	
31	1.329	1.288	.964		
37	1.479	1.438	1.114		
51	1.429	1.388	1.164	.354	.313

- (1) Tolerance is ±.001 unless otherwise specified.
- (2) Optional dimensions for keying.
- (3) L2 & W2 for maximum opening.
- (4) Free of plating, all around.
- (5) This dimension should provide support to connector and sufficient pin protrusion into housing. For thick walls, longer pin lengths are available.