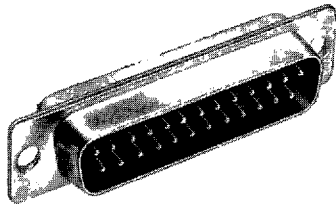
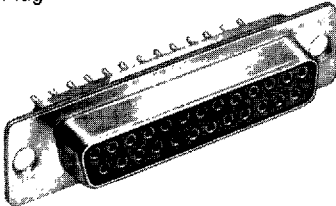


D-Subminiature High Reliability Metal Shell

.109" (2.77mm) Density Dip Solder Series 1



Plug



Socket

Features

- Ideal for high temperature applications
- Available in 5 connector sizes: 9, 15, 25, 37, and 50, with straight or right angle dip solder tails, both plug and socket styles
- Available with standard zinc plated shells or bright tin shells
- Monoblock insulator for improved electrical performance
- Intermateable with all D-Subminiature connectors of comparable pin count and complying dimensionally with MIL-C-24308
- Compatible with vapor phase or IR reflow temperatures
- UL Recognized file no. E19071

Performance Data

Materials

Insulation Material: UL 94V-0 rated glass fiber-filled, diallyl phthalate, monoblock construction; green

Contact Material:

Plugs: Machined brass
Sockets: Machined phosphor bronze

Contact Plating: 20 μ inch gold over nickel

Shell Material: Steel (for optional non magnetic brass shells, consult factory)

Shell Plating: Zinc with yellow chromate coating or bright tin

Electrical Characteristics

Withstanding Voltage: 1250 VAC rms (@ sea level)

Current Rating: 5 Amps

Contact Resistance: 2.7 Milliohms maximum

Insulation Resistance: 5000 Megohms minimum

Mechanical Characteristics

Individual Contact Insertion and Separation Force: 0.7 oz. (20g) minimum, 12 oz. (341g) maximum

Environmental Characteristics

Shock: Exceeds test requirements of MIL-STD-202D, Method 213, Condition G

Operating Temperature: -65°C to +125°C

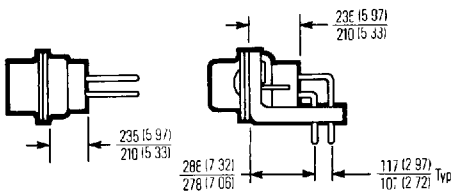
Vibration: Exceeds test requirements of MIL-STD-202D, Method 204, Condition D

Humidity: Exceeds test requirements of MIL-STD-202D, Method 106

Accessories

The only accessories needed for high reliability, metal shell, dip solder D-Subminiature connectors are dust covers. See page 44 for dust cover ordering information.

Dimensions

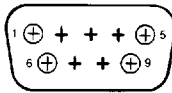


For standard shell dimensions and footprints, see pages 5 and 6

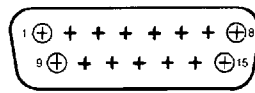
Ordering Information

D	B	M	25	P	B	T	I
Series Prefix D-Subminiature	Shell Size E = 09 A = 15 B = 25 C = 37 D = 50 (for Vertical Mount connectors only)	Series Designator M = Series 1	No. of Contacts 09 15 25 37 50—not available in Right Angle Style	Contact Style P = Plug S = Socket	Contact Type B = Straight Dip Solder Tail 125" (3 18mm) Length H = Straight Dip Solder Tail 156" (3 96mm) Length A = Right Angle Dip Solder Tail 0936" (2 63mm) Length L = Right Angle Dip Solder Tail 156" (3 96mm) Length 9, 15, 25, and 37 plug contacts only	Shell Finish (Optional) No Entry = Zinc/ Yellow Chromate T = Tinned	Modifier (Optional) I = Grounding Indents (Available on plugs with tinned shells only)

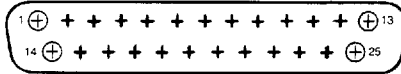
Standard Density Plug Inserts



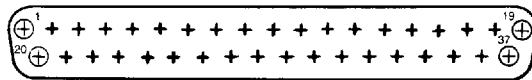
Shell Size E
(9 Position)



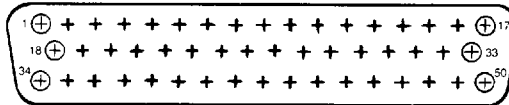
Shell Size A
(15 Position)



Shell Size B
(25 Position)

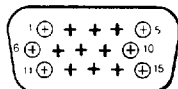


Shell Size C
(37 Position)

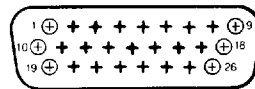


Shell Size D
(50 Position)

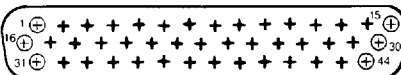
HTD 1.5 Density Plug Inserts



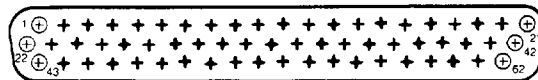
Shell Size E
(15 Position)



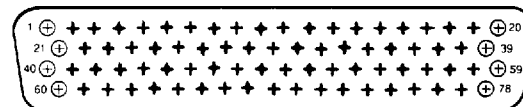
Shell Size A
(26 Position)



Shell Size B
(44 Position)

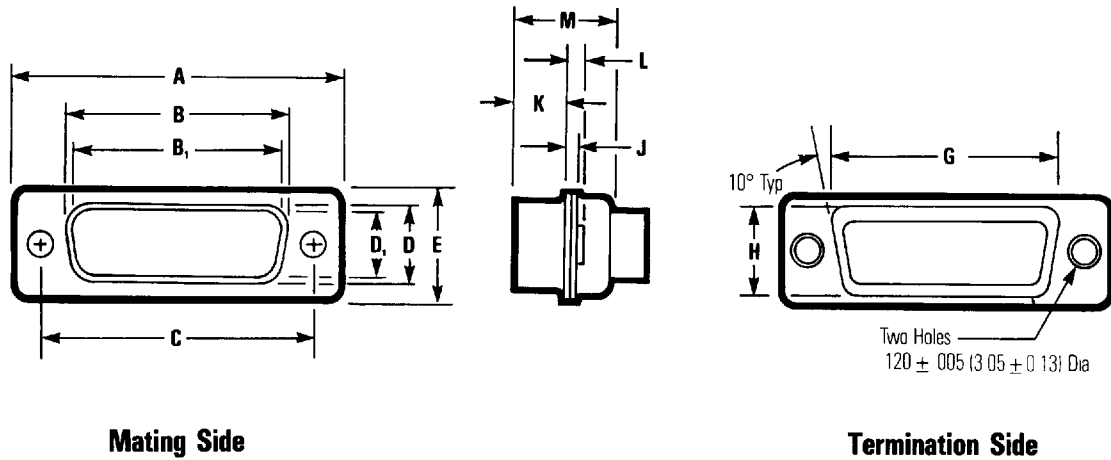


Shell Size C
(62 Position)



Shell Size D
(78 Position)

NOTE: Mating face of plug is shown, receptacle is mirror image.



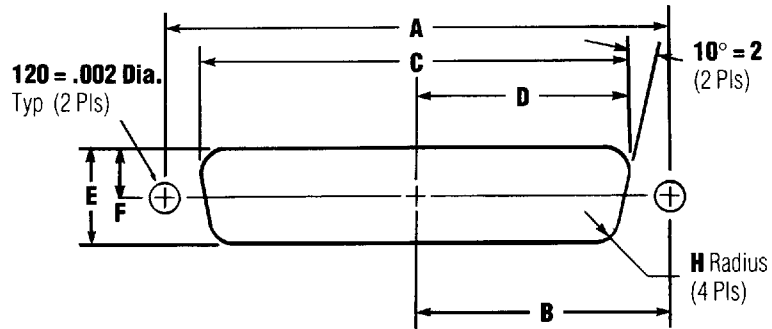
Dimensions

Shell Size	Connector Type	A ± .015" (0.38mm)		B ± .010" (0.25mm)		B ₁ ± .005" (0.13mm)		C ± .005" (0.13mm)		D ± .010" (0.25mm)		D ₁ ± .010" (0.25mm)		E ± .015" (0.38mm)	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	Plug	1.213	30.81	—	—	.666	16.90	.0984	24.99	—	8.40	.329	—	.494	12.55
	Socket	1.213	30.81	.640	16.26	—	—	.0984	24.99	.308	—	—	.782	.494	12.55
A	Plug	1.541	39.14	—	—	.994	25.30	1.312	33.32	—	8.40	.329	—	.494	12.55
	Socket	1.541	39.14	.968	24.59	—	—	1.312	33.32	.308	—	—	.782	.494	12.55
B	Plug	2.088	53.04	—	—	1.534	39.00	1.852	47.04	—	8.40	.329	—	.494	12.55
	Socket	2.088	53.04	1.508	38.30	—	—	1.852	47.04	.308	—	—	.782	.494	12.55
C	Plug	2.729	69.32	—	—	2.182	55.40	2.500	63.50	—	8.40	.329	—	.494	12.55
	Socket	2.729	69.32	2.156	54.76	—	—	2.500	63.50	.308	—	—	.782	.494	12.55
D	Plug	2.635	66.93	—	—	2.079	52.80	2.406	61.11	—	11.07	.436	—	.605	15.37
	Socket	2.635	66.93	2.062	52.34	—	—	2.406	61.11	.420	—	—	10.67	.605	15.37

Shell Size	Connector Type	G ± .010" (0.25mm)		H ± .010" (0.25mm)		J ± .010" (0.25mm)		K ± .010" (0.25mm)		L ± .010" (0.25mm)		M ± .010" (0.25mm)	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	Plug	.759	19.28	.422	10.72	.030	0.76	.236	5.99	.045	1.14	.422	10.72
	Socket	.759	19.28	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
A	Plug	1.083	27.51	.422	10.72	.030	0.76	.236	5.99	.045	1.14	.422	10.72
	Socket	1.083	27.51	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
B	Plug	1.625	41.27	.422	10.72	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	1.625	41.27	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
C	Plug	2.272	57.71	.422	10.72	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	2.272	57.71	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
D	Plug	2.178	55.32	.534	13.56	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	2.178	55.32	.534	13.56	.030	0.76	.243	6.17	.045	1.14	.429	10.92

B and D are outside dimensions for socket. B₁ and D₁ are inside dimensions for plug

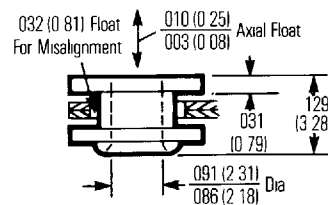
Panel Mounting Specifications



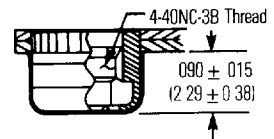
Dimensions

Shell Size	Mounting Method Front/Rear Panel	Dimensions (inches)						
		A	B	C	D	E	F	H
E	Front	0.98	0.49	0.87	0.44	0.51	0.26	0.08
	Rear	0.98	0.49	0.81	0.40	0.45	0.23	0.13
A	Front	1.31	0.66	1.10	0.60	0.51	0.26	0.08
	Rear	1.31	0.66	1.13	0.57	0.45	0.23	0.13
B	Front	1.85	0.93	1.74	0.87	0.51	0.26	0.08
	Rear	1.85	0.93	1.67	0.84	0.45	0.23	0.13
C	Front	2.50	1.25	2.39	1.20	0.51	0.26	0.08
	Rear	2.50	1.25	2.33	1.16	0.45	0.23	0.13
D	Front	2.41	1.20	2.30	1.15	0.62	0.31	0.08
	Rear	2.41	1.20	2.22	1.11	0.56	0.28	0.13

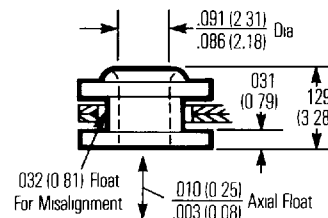
Float Bushing



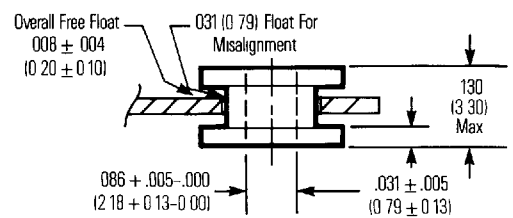
4-40 Clinch Nut



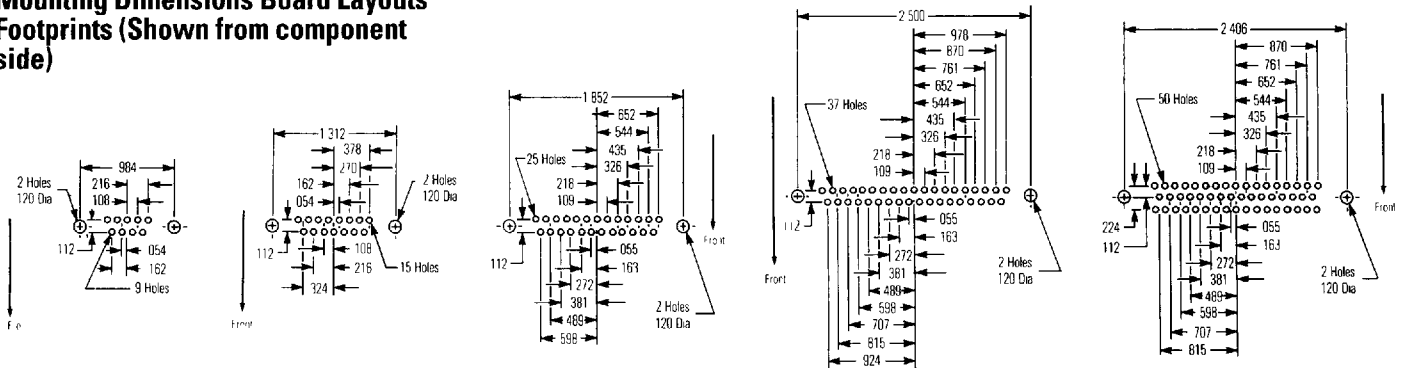
Reverse Float Bushing



Floating Dual Bushing

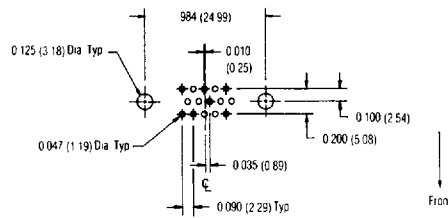


Standard Density D-Subminiature Mounting Dimensions Board Layouts Footprints (Shown from component side)

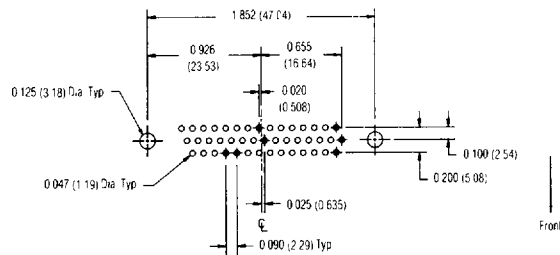


1.5 Density D-Subminiature Recommended PCB Layout For Footprint (Component Side Shown)

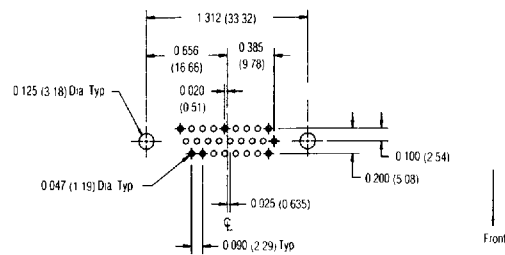
15 Position PCB Layout



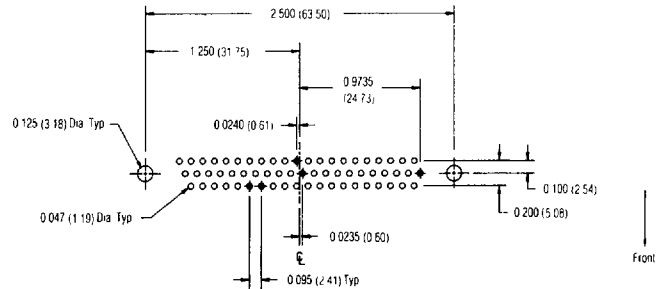
44 Position PCB Layout



26 Position PCB Layout



62 Position PCB Layout



The footprints on this page are standard for all metal shell D-Subminiature Connectors.

On all right angle D-Subminiature Connectors the short row of contacts is positioned closest to the edge of the board.

PC Board Lead Hole Size

Terminal Dia.		Hole Dia.	
in	mm	in	mm
040	1.02	055	1.40
030	0.76	045	1.14
.024	0.61	039	0.99