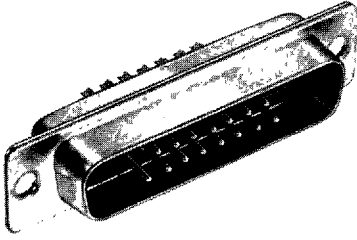
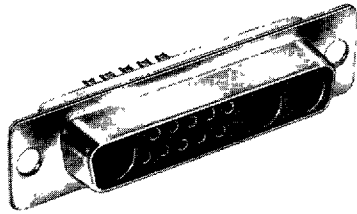


**D-Subminiature  
High Reliability  
Metal Shell**

**.109" (2.77mm) Density  
Coaxial/High Voltage  
High Power/Solder Cup  
Combination Layout**



Plug



Socket

**Features**

- Available in a variety of contact styles and sizes
- Signal contact are fixed, non-removable solder cup contacts
- Coaxial, high voltage and high-power contacts must be ordered separately
- New 75 OHM coaxial contacts

**Performance Data**

**Materials**

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

**Contact Material:**

Plug Contacts: Brass (machined)  
Socket Contacts: Phosphor bronze (machined)

**Contact Plating:** Signal contacts 20 µinch gold over nickel

**Shell Material:** Steel

**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

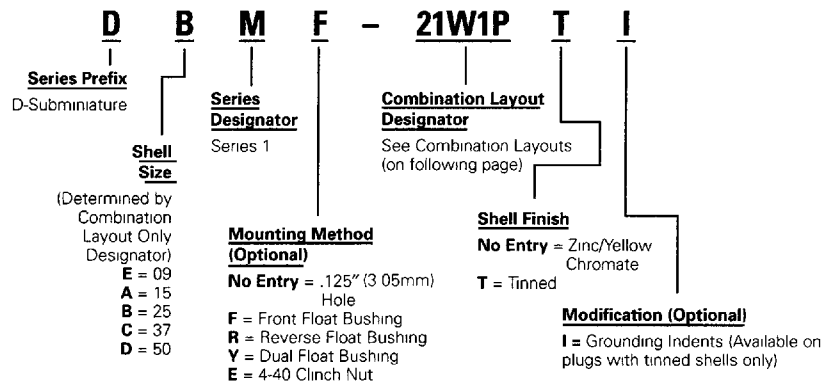
**Vibration:** Exceeds requirements of MIL-STD-202D, Method 204, Condition D

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

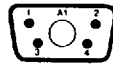
**Accessories**

For metal shell D-Subminiature Connector accessories, see pages 34 through 45. For coaxial, high voltage, and high power contact information, refer to the following pages.

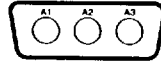
**Ordering Information**



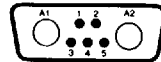
**Combination Layouts**



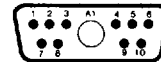
**E**  
DEM-5W1P  
DEM-5W1S



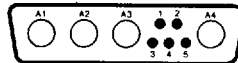
**A**  
DAM-3W3P  
DAM-3W3S



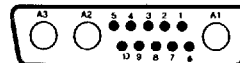
**A**  
DAM-7W2P  
DAM-7W2S



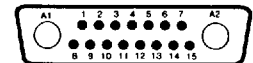
**A**  
DAM-11W1P  
DAM-11W1S



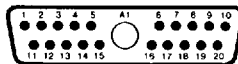
**B**  
DBM-9W4P  
DBM-9W4S



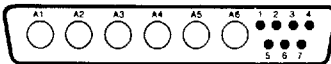
**B**  
DBM-13W3P  
DBM-13W3S



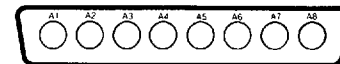
**B**  
DBM-17W2P  
DBM-17W2S



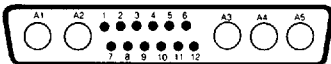
**B**  
DBM-21W1P  
DBM-21W1S



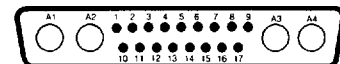
**C**  
DCM-13W6P  
DCM-13W6S



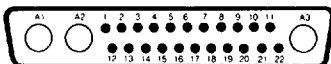
**C**  
DCM-8W8P  
DCM-8W8S



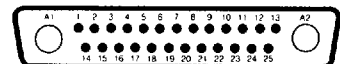
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DCM-17W5P  
DCM-17W5S



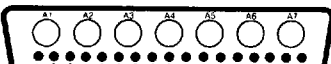
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DCM-21WA4P  
DCM-21WA4S



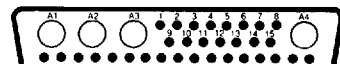
**C**  
DCM-25W3P  
DCM-25W3S



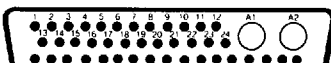
**C**  
DCM-27W2P  
DCM-27W2S



**D**  
DDM-24W7P  
DDM-24W7S



**D**  
DDM-36W4P  
DDM-36W4S

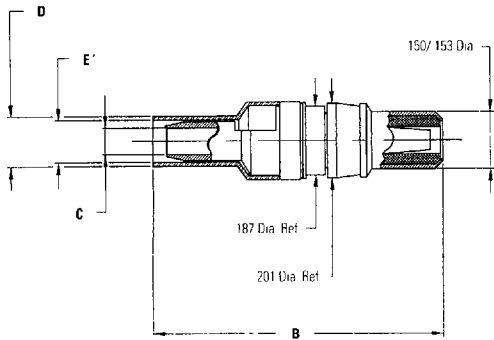


**D**  
DDM-43W2P  
DDM-43W2S

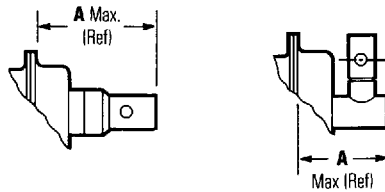
**D-Subminiature  
High Reliability  
Metal Shell**

**.109" (2.77mm) Density  
Coaxial/High Voltage  
High Power/Solder Cup  
Combination Layout**

**Straight Plug**



**Coaxial Contacts—Standard**



**Performance Data  
Materials**

**Receptacle**

Body: Beryllium copper  
Insulator: Teflon  
Contacts: Brass

**Plug**

Body: Brass  
Insulator: Teflon  
Contacts: Beryllium copper

**Contact Finishes**

Standard: .00003 min. gold over nickel  
Military: .00005 min. gold over copper

**Electrical Characteristics**

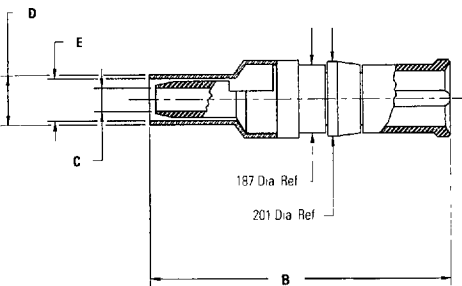
**Dielectric Withstanding Voltage:**

Cable contacts: 1000 VRMS  
P.C.B. contacts: 800 VRMS

**Recommended Frequency Range:**

0–900 MHz

**Straight Receptacle**



**Ordering Information**

**Straight Solder Braid Coaxial Contacts**

Part No.	Standard Gold Part No.	50 Mil Gold Part No.	Dimensions										RG Cable No.	
			A Max.		B. Ref.		C ±.005"		D		E		Old	New
			in	mm	in	mm	in	mm	in	mm	in	mm		
Plug	DM53740-5008	DM53740-5105	.739	18.77	0.929	23.60	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Plug	DM53740-5001	DM53740-5099	.739	18.77	0.929	23.60	.067	1.70	.152	3.86	.125	3.18	187/U	179B/U
Plug	DM53740-5002	DM53740-5104	.847	21.51	1.037	26.34	.108	2.79	.235	5.97	.202	5.13	195/U	180B/U
Plug	DM53740-5005	DM53740-5101	.847	21.51	1.037	26.34	.120	3.18	.235	5.97	.202	5.13	58/U	58B/U
Socket	DM53742-5006	DM53742-5092	.739	18.77	0.929	23.60	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Socket	DM53742-5001	DM53742-5089	.739	18.77	0.929	23.60	.067	1.70	.152	3.86	.125	3.18	187/U	179B/U
Socket	DM53742-5002	DM53742-5091	.847	21.51	1.037	26.34	.108	2.79	.235	5.97	.202	5.13	195/U	180B/U
Socket	DM53742-5004	DM53742-5086	.847	21.51	1.037	26.34	.120	3.18	.235	5.97	.202	5.13	58/U	58B/U
Plug (Short)	DM53740-5000	DM53740-5100	.670	17.02	0.860	21.84	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Socket (Short)	DM53742-5000	DM53742-5085	.670	17.02	0.860	21.84	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U

**Straight Crimp Braid Coax Contacts**

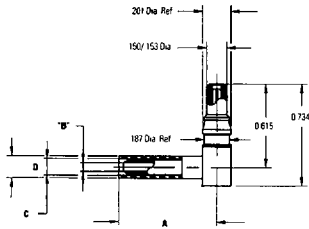
Part No.	Standard Gold Part No.	50 Mil Gold Part No.	Dimensions										RG Cable No.	
			A Max.		B. Ref.		C ±.005"		D		E		Old	New
			in	mm	in	mm	in	mm	in	mm	in	mm		
Plug	DM53740	DM53740-17	.739	18.77	.929	23.60	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Plug	DM53740-1	DM53740-15	.739	18.77	.929	23.60	.067	1.70	.152	3.86	.125	3.18	187/U	178B/U
Plug	DM53740-3	DM53740-16	.847	21.51	1.037	26.34	.108	2.79	.235	5.97	.202	5.13	195/U	180B/U
Plug	DM53740-5	DM53740-18	.847	21.51	1.037	26.34	.120	3.18	.235	5.97	.202	5.13	58/U	58B/U
Socket	DM53742	DM53742-18	.739	18.77	.929	23.60	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Socket	DM53742-1	DM53742-16	.739	18.77	.929	23.60	.067	1.70	.152	3.86	.125	3.18	187/U	179B/U
Socket	DM53742-3	DM53742-17	.847	21.51	1.037	26.34	.108	2.79	.235	5.97	.202	5.13	195/U	180B/U
Socket	DM53742-5	DM53742-19	.847	21.51	1.037	26.34	.120	3.18	.235	5.97	.202	5.13	58/U	58B/U

**D-Subminiature  
High Reliability  
Metal Shell**

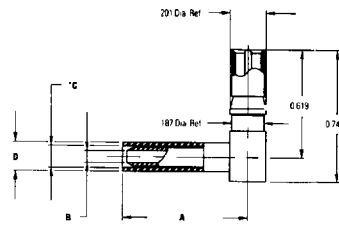
.109" (2.77mm) Density  
Coaxial/High Voltage  
High Power/Solder Cup  
Combination Layout

**CINCH**

**Right Angle Coax Contacts  
Plug**



**Receptacle**



**Right Angle Solder Braid Coaxial Contacts**

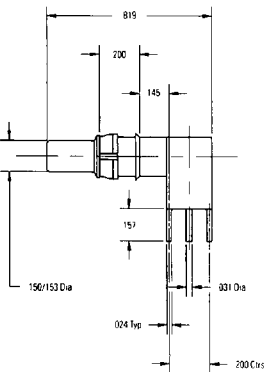
	Standard Gold Part No.	Dimensions				D ± .005"		RG Cable No.				
		50 Mil Gold Part No.	A Max. in	mm	B Ref. in	mm	in	mm	Old	New		
Plug	DM53741-5000	DM53741-5059	.492	12.5	.040	1.02	.093	2.36	.124	3.18	196/U	178B/U
Plug	DM53741-5001	DM53741-5062	.492	12.5	.067	1.70	.125	3.18	.152	3.86	187/U	179B/U
Socket	DM53743-5000	DM53743-5073	.492	12.5	.040	1.02	.093	2.36	.124	3.18	196/U	178B/U
Socket	DM53743-5001	DM53743-5076	.492	12.5	.067	1.70	.125	3.18	.152	3.86	187/U	179B/U

**Right Angle Crimp Braid Contacts**

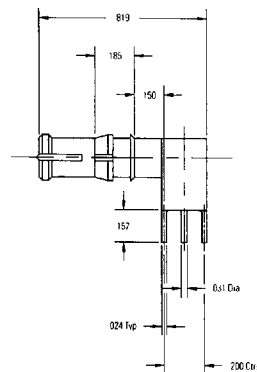
	Standard Gold Part No.	Dimensions				RG Cable No.		Die Crimp Size	
		A Max. in	B Ref. in	C in	D ± .005" in	Old	New	in	mm
Plug	DM53741-3	.601	.108	.202	.235	195/U	180B/U	.199	5.06
Socket	DM53743-6	.601	.120	.202	.235	58/U	58B/U	.199	5.06

**Printed Circuit Board Coax Contacts**

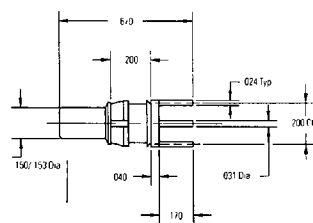
**Right Angle PCB Contacts  
Plug**



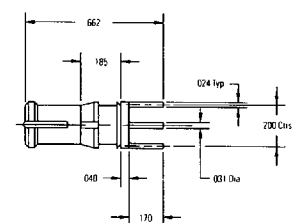
**Receptacle**



**Straight PCB Contacts  
Plug**



**Receptacle**



**Ordering Information**

Right Angle	Part Number Standard Gold	Part Number 50 Mil Gold
Plug	167-06-01-023	167-06-02-023
Receptacle	167-06-01-024	167-06-02-024

**Ordering Information**

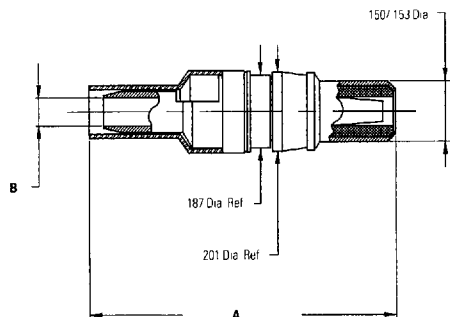
	Part Number Standard Gold	Part Number 50 Mil Gold
Straight Plug	167-06-01-021	167-06-02-021
Straight Receptacle	167-06-01-022	167-06-02-022

# D-Subminiature High Reliability Metal Shell

.109" (2.77mm) Density  
Coaxial/High Voltage  
High Power/Solder Cup  
Combination Layout

## 75 OHM Coaxial Contacts

### Plug



## Performance Data

### Materials

#### Receptacle

Body: Brass or beryllium copper  
(refer to table)  
Insulator: Teflon  
Contacts: Brass

#### Plug

Body: Brass  
Insulator: Teflon  
Contacts: Beryllium copper

#### Contact Finishes

Standard: .00003 min. gold over nickel  
Military: .00005 min. gold over copper

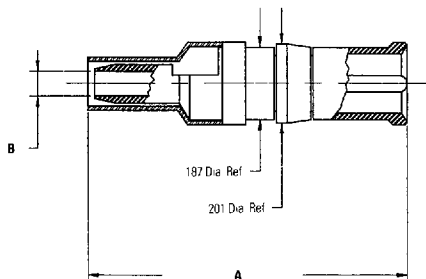
## Electrical Characteristics

**Dielectric Withstanding Voltage:** 1000 VRMS

**Recommended Frequency Range:** 0–2 GHz

**Nominal Impedance:** 75 Ohms

### Receptacle



## Ordering Information—Crimp/Solder Termination

	Standard Gold Part Number	50 Mil Gold Part Number	Dimensions				Body Material	Cable
			A		B			
			in	mm	in	mm		
Plug	167-06-01-012	167-06-02-012	1.037	26.34	108	2.74	Brass	Belden 8218
Plug	167-06-01-011	167-06-02-011	0.929	23.60	067	1.70	Brass	RG179
Receptacle	167-06-01-008	167-06-02-008	1.037	26.34	108	2.74	Brass	Belden 8218
Receptacle	167-06-01-007	167-06-02-007	0.929	23.60	067	1.70	Brass	RG179
Receptacle	167-06-01-006	167-06-02-006	1.037	26.34	108	2.74	Beryllium Copper	Belden 8218
Receptacle	167-06-01-005	167-06-02-005	0.929	23.60	067	1.70	Beryllium Copper	RG179

## Ordering Information—Crimp/Crimp Termination

	Standard Gold Part Number	50 Mil Gold Part Number	Dimensions				Body Material	Cable
			A		B			
			in	mm	in	mm		
Plug	167-06-01-010	167-06-02-010	1.050	26.67	108	2.74	Brass	Belden 8218
Plug	167-06-01-009	167-06-02-009	1.050	26.67	067	1.70	Brass	RG179
Receptacle	167-06-01-004	167-06-02-004	1.090	27.69	108	2.74	Brass	Belden 8218
Receptacle	167-06-01-003	167-06-02-003	1.090	27.69	067	1.70	Brass	RG179
Receptacle	167-06-01-002	167-06-02-002	1.090	27.69	108	2.74	Beryllium Copper	Belden 8218
Receptacle	167-06-01-001	167-06-02-001	1.090	27.69	067	1.70	Beryllium Copper	RG179

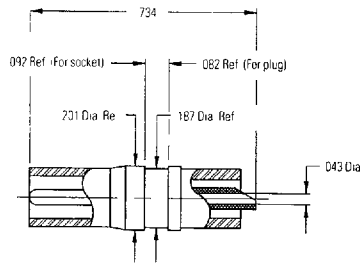
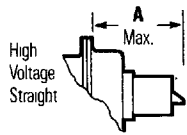
Note: Receptacles with brass bodies have a beryllium copper "napkin ring" around tines for comparable performance to receptacles with beryllium copper bodies

# D-Subminiature High Reliability Metal Shell

.109" (2.77mm) Density  
Coaxial/High Voltage  
High Power/Solder Cup  
Combination Layout

# CINCH

## Straight High Voltage Contacts



## Performance Data

### Materials

**Bodies:** Nylon per MIL-P-20693

### Contacts

Female: Beryllium copper  
Male: Brass

### Contact Finishes

Standard: .00003 min. gold over nickel  
Military: .00005 min. gold over copper

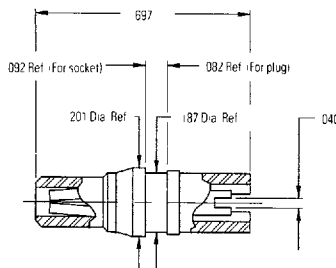
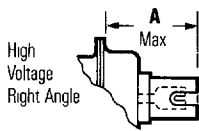
### Electrical Characteristics

**Test Voltage In Shell:** 1000 VRMS to shell

### Dimensions

	Standard Gold Part No.	50 Mil Gold Part No.	A Max.		Overall Length		Wire Size
			in	mm	in	mm	
Plug	DM51157	DM51157-8	.539	13.69	.734	18.64	#20
Socket	DM51155	DM51155-7	.539	13.69	.734	18.64	#20

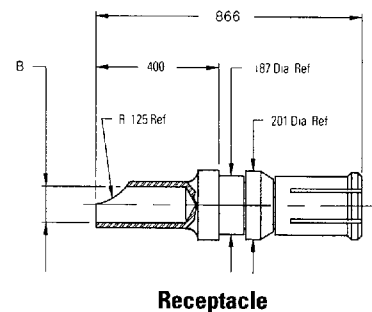
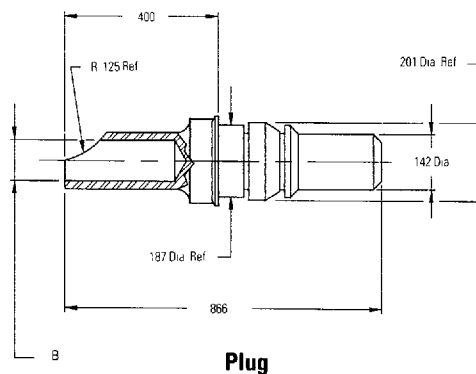
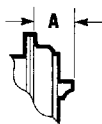
## Right Angle High Voltage Contacts



### Contact Ext. from Rear of Flange

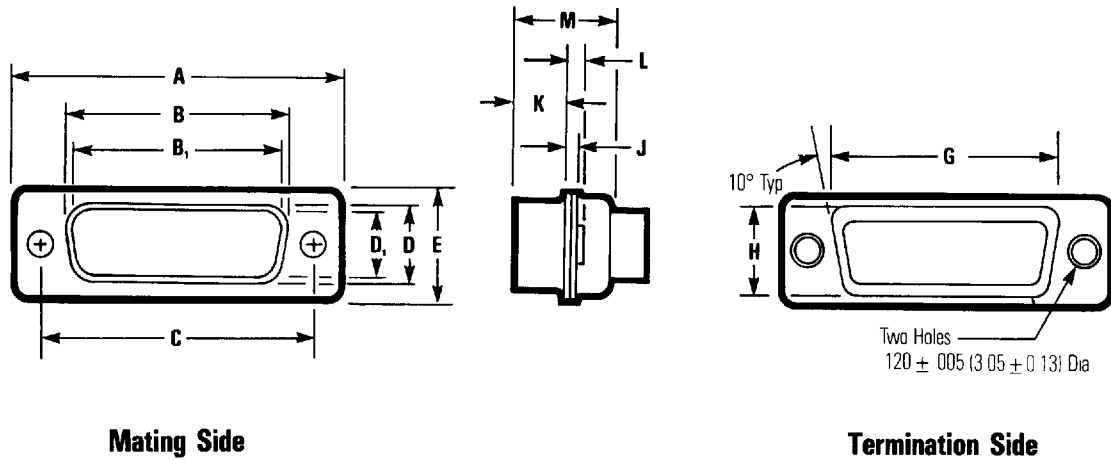
Style		Standard Gold Part No.	50 Mil Gold Part No.	A		Overall Length		Wire Size
				in	mm	in	mm	
Right Angle	Plug	DM51157-5000	DM51157-5005	.491	12.47	.697	17.70	#20
	Receptacle	DM51155-5000	DM51155-5004	.491	12.47	.697	17.70	#20

## High Power Solder Contacts



### Dimensions

	Standard Gold Part No.	50 Mil Gold Part No.	Dimensions		Current Rating Amps	Wire Size
			A Max. in	B in		
Plug	DM53745-1	DM53745-28	.188	.218	40	#8
Plug	DM53745-7	DM53745-27	.112	.142	20	#12
Plug	DM53745-8	DM53745-25	.100	.100	10	#16
Socket	DM53744-1	DM53744-21	.188	.218	40	#8
Socket	DM53744-6	DM53744-25	.112	.142	20	#12
Socket	DM53744-7	DM53744-24	.069	.100	10	#16



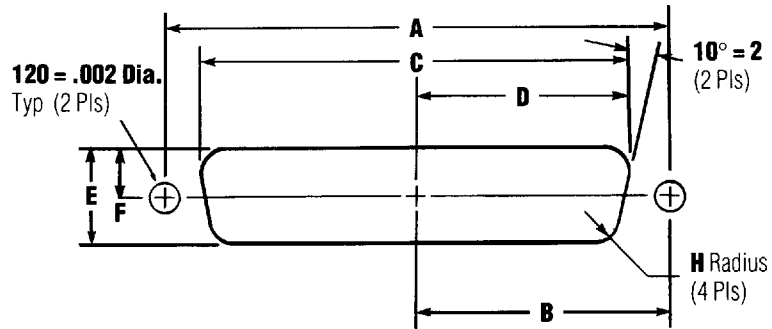
**Dimensions**

Shell Size	Connector Type	A ± .015" (0.38mm)		B ± .010" (0.25mm)		B <sub>1</sub> ± .005" (0.13mm)		C ± .005" (0.13mm)		D ± .010" (0.25mm)		D <sub>1</sub> ± .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. B<sub>1</sub> and D<sub>1</sub> are inside dimensions for plug

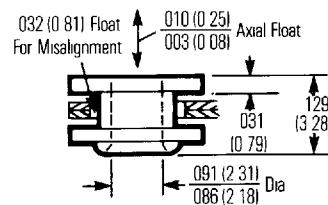
**Panel Mounting Specifications**



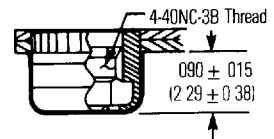
**Dimensions**

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

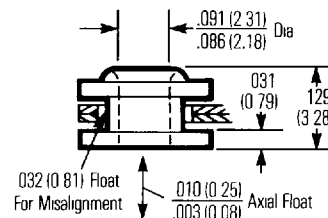
**Float Bushing**



**4-40 Clinch Nut**



**Reverse Float Bushing**



**Floating Dual Bushing**

