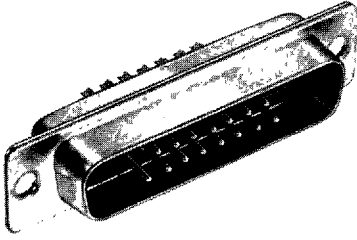
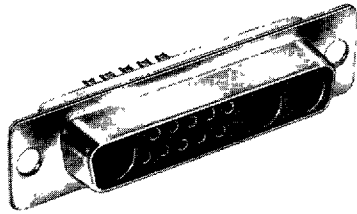


**D-Subminiature
High Reliability
Metal Shell**

**.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

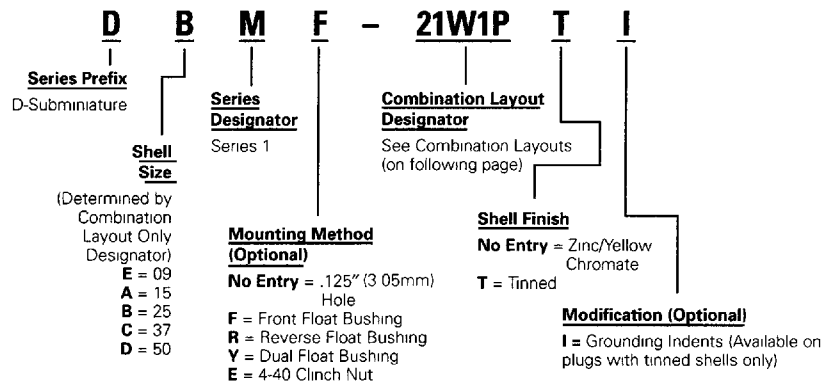
Vibration: Exceeds requirements of MIL-STD-202D, Method 204, Condition D

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

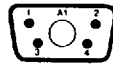
Accessories

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.

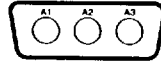
Ordering Information



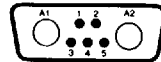
Combination Layouts



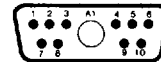
E
DEM-5W1P
DEM-5W1S



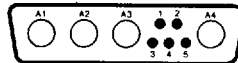
A
DAM-3W3P
DAM-3W3S



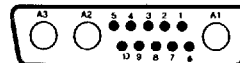
A
DAM-7W2P
DAM-7W2S



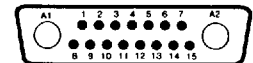
A
DAM-11W1P
DAM-11W1S



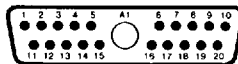
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DBM-9W4P
DBM-9W4S



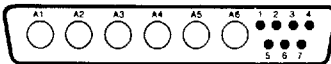
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DBM-13W3P
DBM-13W3S



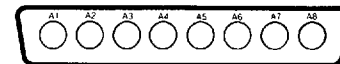
B
DBM-17W2P
DBM-17W2S



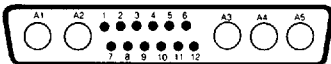
B
DBM-21W1P
DBM-21W1S



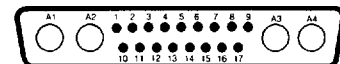
C
DCM-13W6P
DCM-13W6S



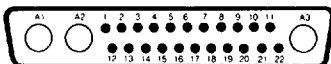
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DCM-8W8P
DCM-8W8S



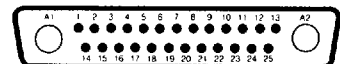
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DCM-17W5P
DCM-17W5S



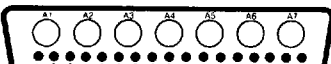
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DCM-21WA4P
DCM-21WA4S



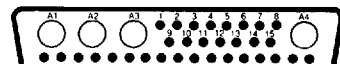
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DCM-25W3P
DCM-25W3S



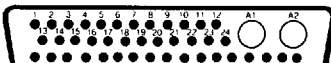
C
DCM-27W2P
DCM-27W2S



D
DDM-24W7P
DDM-24W7S



D
DDM-36W4P
DDM-36W4S

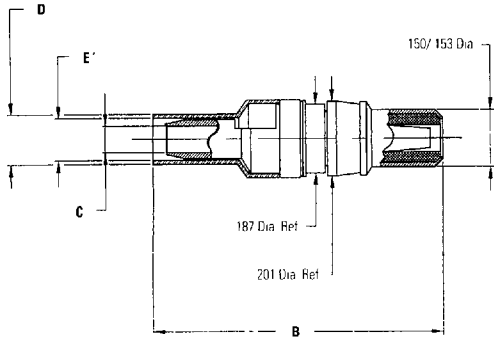


D
DDM-43W2P
DDM-43W2S

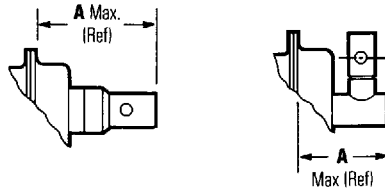
**D-Subminiature
High Reliability
Metal Shell**

**.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

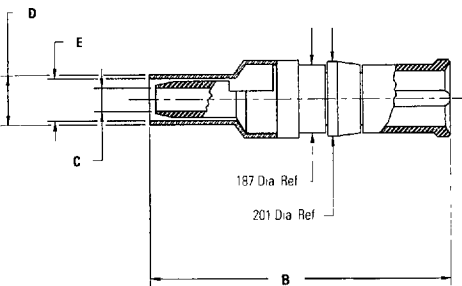
Dielectric Withstanding Voltage:

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

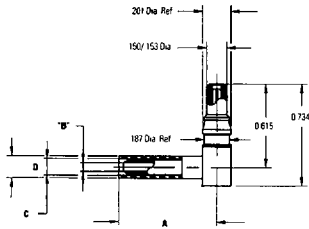
Part No.	Standard Gold Part No.	50 Mil Gold Part No.	Dimensions										RG Cable No.	
			A Max.		B. Ref.		C ± .005"		D		E		Old	New
			in	mm	in	mm	in	mm	in	mm	in	mm		
Plug	DM53740	DM53740-17	.739	18.77	.929	23.60	.040	1.02	.124	3.15	.093	2.36	196/U	178B/U
Plug	DM53740-1	DM53740-15	.739	18.77	.929	23.60	.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

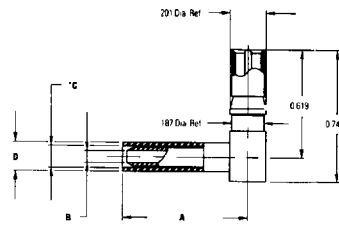
.109" (2.77mm) Density
Coaxial/High Voltage
High Power/Solder Cup
Combination Layout

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	C 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

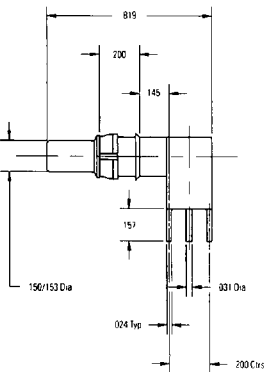
Right Angle Crimp Braid Contacts

	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

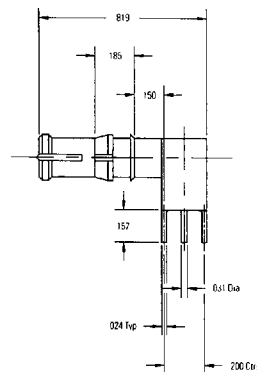
Printed Circuit Board Coax Contacts

Right Angle PCB Contacts

Plug

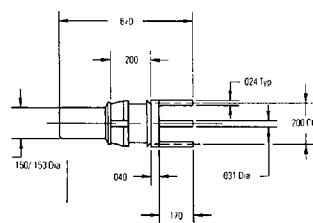


Receptacle

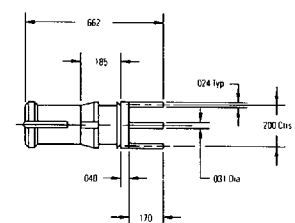


Straight PCB Contacts

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

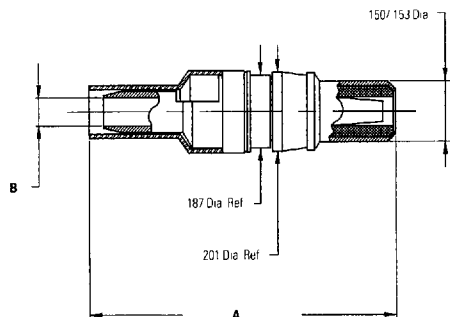
	Part Number Standard Gold	Part Number 50 Mil Gold
Straight Plug	167-06-01-021	167-06-02-021
Straight Receptacle	167-06-01-022	167-06-02-022

**D-Subminiature
High Reliability
Metal Shell**

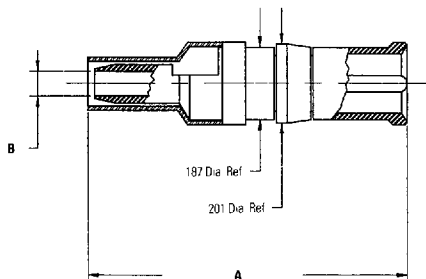
**.109" (2.77mm) Density
Coaxial/High Voltage
High Power/Solder Cup
Combination Layout**

75 OHM Coaxial Contacts

Plug



Receptacle



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

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

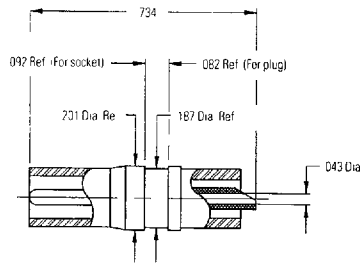
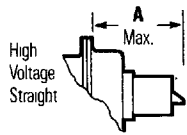
Note: Receptacles with brass bodies have a beryllium copper "napkin ring" around tines for comparable performance to receptacles with beryllium copper bodies

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

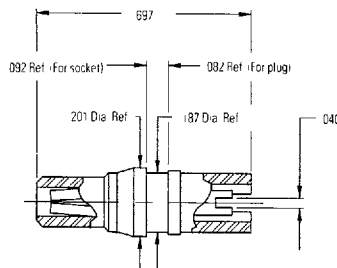
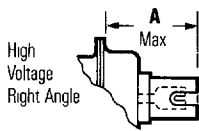
Electrical Characteristics

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

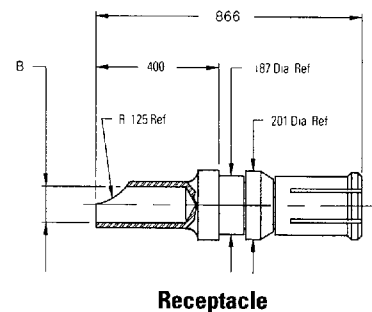
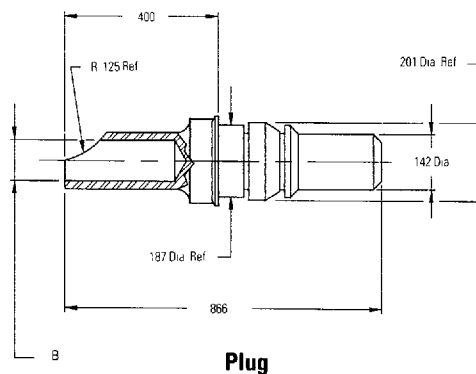
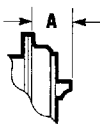
Right Angle High Voltage Contacts



Contact Ext. from Rear of Flange

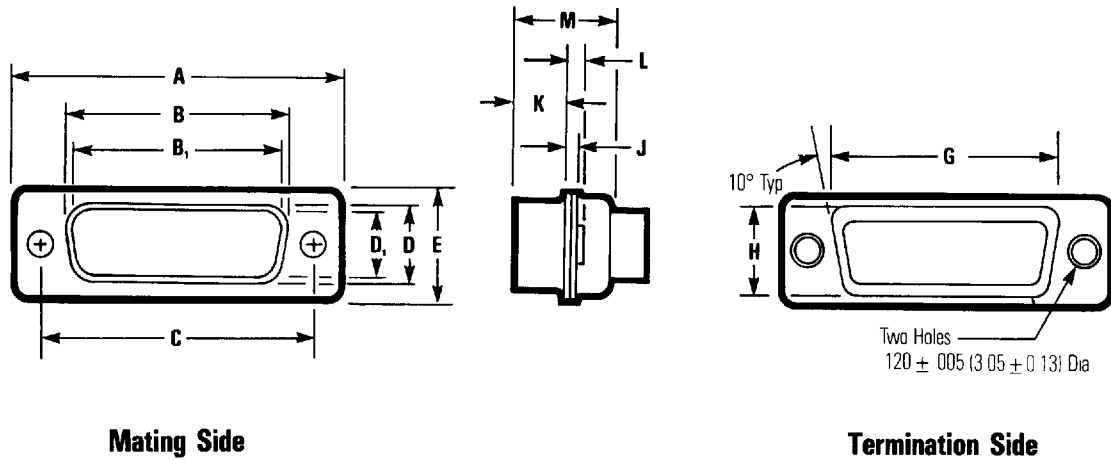
Style		Standard Gold Part No.	50 Mil Gold Part No.	A	Overall Length		Wire Size	
					in	mm		in
Right Angle	Plug	DM51157-5000	DM51157-5005	.491	12.47	697	17.70	#20
	Receptacle	DM51155-5000	DM51155-5004	.491	12.47	697	17.70	#20

High Power Solder Contacts



Dimensions

	Standard Gold Part No.	50 Mil Gold Part No.	Dimensions		Current Rating Amps	Wire Size
			A Max.	B		
			in	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



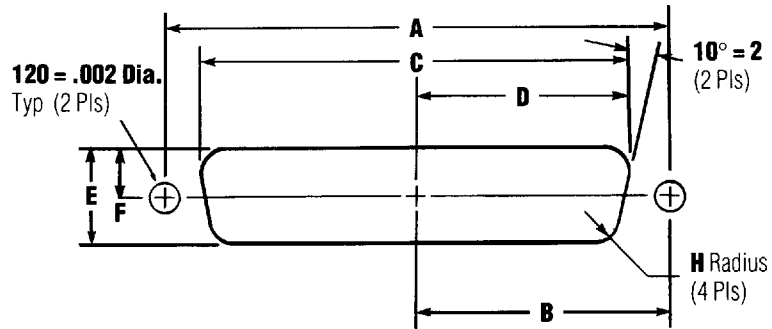
Dimensions

Shell Size	Connector Type	A ± .015" (0.38mm)		B ± .010" (0.25mm)		B 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

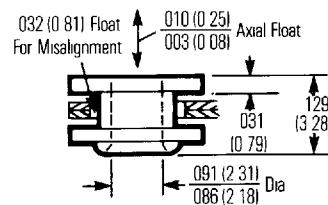
Panel Mounting Specifications



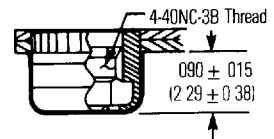
Dimensions

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

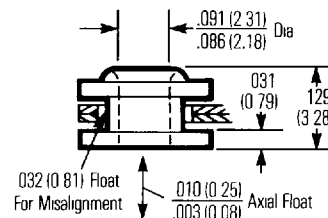
Float Bushing



4-40 Clinch Nut



Reverse Float Bushing



Floating Dual Bushing

