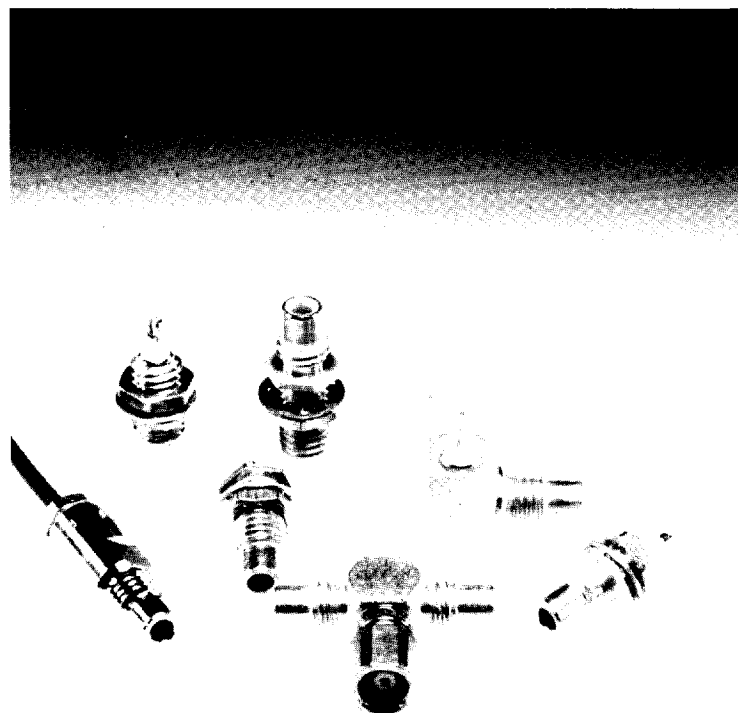


50 Ω

DC - 10 GHz

**GENERAL**

- Subminiature coaxial connectors
- Screw-on coupling
- Plugs have female contacts
- Jacks have male contacts
- Low weight
- Reduced outline dimensions

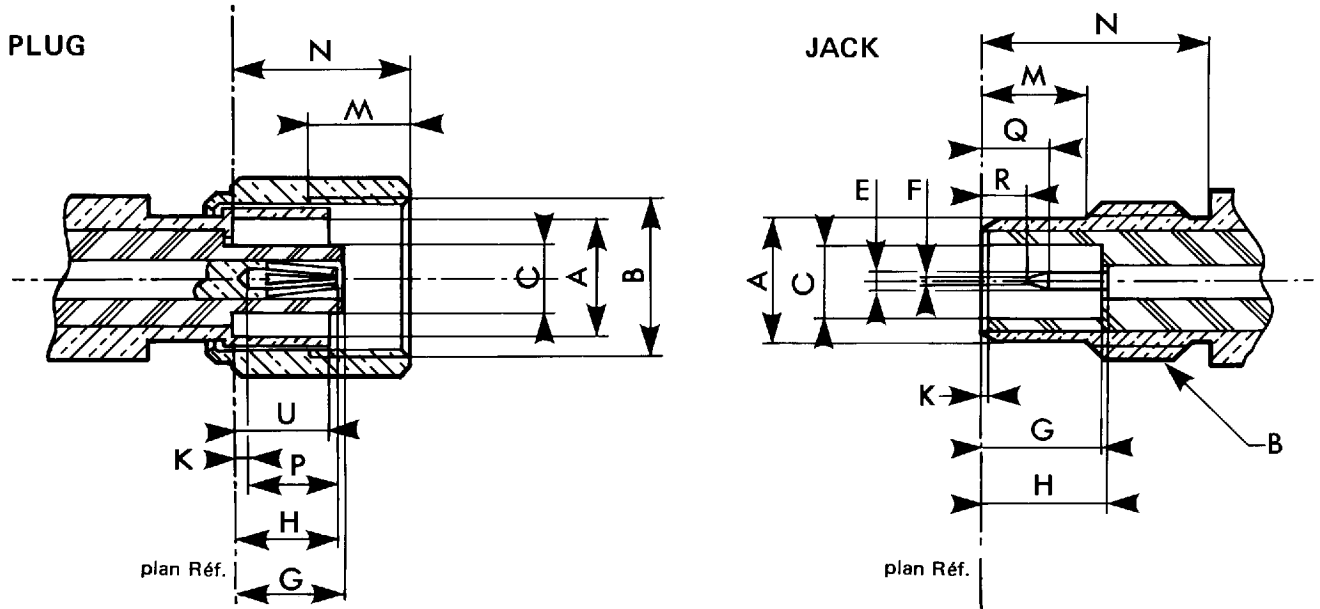
APPLICABLE STANDARDS

- MIL-C-39012

APPLICATIONS

- IF Systems
- Civil & Military Telecommunication
- Aeronautics
- Missiles
- Edge mounting applications

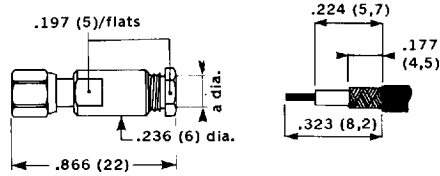
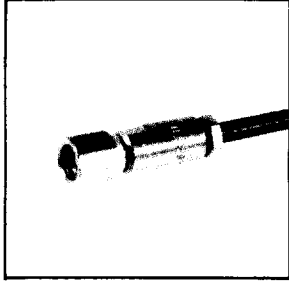
REQUIREMENT	MIL - C - 39012 paragraph	GENERAL SPECIFICATIONS	
ELECTRICAL			
Impedance		50 Ω	
Frequency range		0 - 10 GHz	
V.S.W.R.	3 - 14	cable	2/50 2,6/50
		straight	1,25 +0,04 F (GHz) 1,20 +0,04 F (GHz)
		right angle	1,40 +0,06 F (GHz) 1,30 +0,04 F (GHz)
Insertion loss	3 - 27	straight	: 0,25 dB max. at 4 GHz
		right angle	: 0,5 dB max. at 4 GHz
			– 60 dB min. between 2 and 3 GHz
RF leakage	3 - 26		
Insulation resistance	3 - 11		1000 megohms min.
Contact resistance	3 - 16		
			Initial After environment
		Centre contact (m Ω)	6 8
		Outer contact (m Ω)	1 1,5
Voltage rating (volts RMS)		cable 2/50 : at sea level	250 V, at 70000 ft 60 V
		cable 2,6/50 : at sea level	335 V, at 21000 m 85 V
Dielectric withstanding voltage	3 - 17	cable 2/50 : at sea level	750 V, at 70000 ft 185 V
		cable 2,6/50 : at sea level	1000 V, at 21000 m 250 V
RF high potential withstanding voltage (Frequency 5 MHz)	3 - 23	cable 2/50 : at sea level	500 V
		cable 2,6/50 : at sea level	700 V
MECHANICAL			
Life	3 - 15	500 matings	
Force to engage and disengage	3 - 5 - 1	torque : 16 inch-ounces max. – 11,3 Ncm	
Mating torque		35 to 50 inch-ounces – 25 to 35 Ncm	
Coupling nut proof torque		100 inch-ounces – 71 Ncm	
Coupling nut retention force	3 - 25	35 lbs. min. – 156 N min.	
Cable retention force	3 - 24	cable 2/50 : 13 lbs – 58 N and cable 2,6/50 : 25 lbs – 110 N	
Contact captivation		axial force : 4 lbs – 18 N. torque : not applicable.	
ENVIRONMENTAL			
Operating temperature range		standard models	: – 65°C + 165°C
		hermetic	: – 65°C + 165°C
		semi rigid cables	: – 65°C + 105°C
Temperature cycling		MIL - STD - 202, method 102, condition C	
Thermal shock	3 - 20	MIL - STD - 202, method 107, condition B	
High temperature test		MIL - STD - 202, method 108	
Corrosion (salt spray)	3 - 13	MIL - STD - 202, method 101, condition B, 5%	
Vibration	3 - 18	MIL - STD - 202, method 204, condition D, 20 g	
Shock	3 - 19	MIL - STD - 202, method 213, condition C, 100 g	
Moisture resistance	3 - 21	not applicable	
Barometric pressure	3 - 22	MIL - STD - 202, method 105, condition C	
Hermetic test		down to 10 ⁻⁶ mm Hg (Torr)	
		leak rate < 1 x 10 ⁻⁶ atm/cm ³ /sec	
MATERIALS			
Bodies and male contacts		brass, half hard per QQ - B - 626	
Female contacts and interfaces		beryllium copper per QQ - C - 530	
Ferrules		brass	
Insulators		PTFE teflon	
Gaskets		silicone rubber	
PLATING			
Body		gold to satisfy the corrosion requirements	
Centre contacts		gold	



SMC

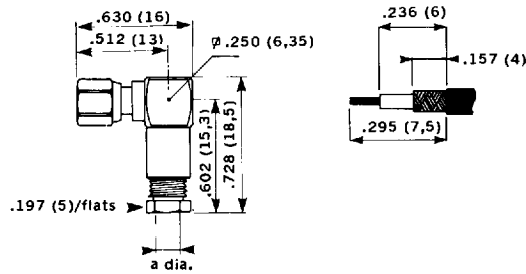
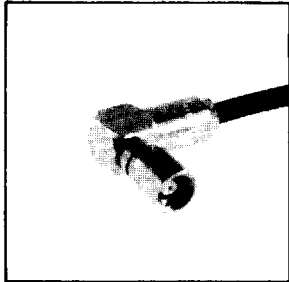
Letter	PLUG				JACK			
	mm		Inch		mm		Inch	
	min.	max.	min.	max.	min.	max.	min.	max.
Ø A	3,73	—	.147	—	—	3,71	—	.146
B	N° 10 - 32 UNF - 2 B				N° 10 - 32 UNF - 2 A			
Ø C	—	2,06	—	.081	2,08	—	.082	—
Ø E	—	—	—	—	0,48	0,53	.019	.021
Ø F	—	—	—	—	—	0,25	—	.010
G	—	3,40	—	.134	3,40	—	.134	—
H	—	3,40	—	.134	3,40	—	.134	—
K	—	—	—	—	000	—	000	—
M	2,79	—	.110	—	3,12	3,38	.123	.133
N	—	5,92	—	.233	5,94	—	.234	—
P	2,79	—	.110	—	—	—	—	—
Q	—	—	—	—	—	2,13	—	.084
R	—	—	—	—	0,61	—	.024	—
U	—	3,10	—	.122	—	—	—	—

STRAIGHT PLUG



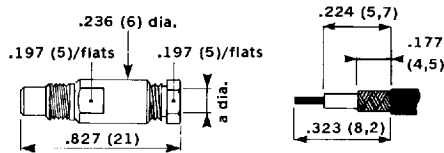
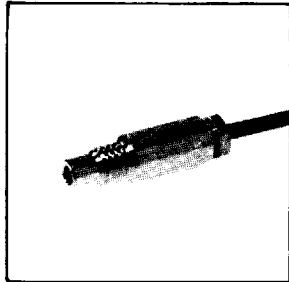
CABLE RG	178 B/U - 196 A/U	174 A/U - 188 A/U 179 B/U - 187 A/U
PART NUMBER	R 112 003	R 112 005
MIL no.	UG - 1460/U M39012/73-0003	UG - 1465/U M39012/73-0004
a dia.	.087 (2,2)	.118 (3)
Assembly	M 01	M 01

RIGHT ANGLE PLUG



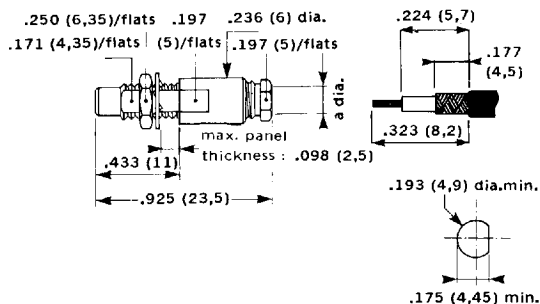
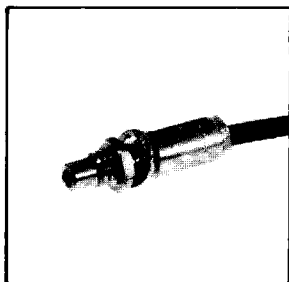
CABLE RG	178 B/U - 196 A/U	174 A/U - 188 A/U 179 B/U - 187 A/U
PART NUMBER	R 112 163	R 112 165
MIL no.	UG - 1461/U M39012/75-0003	UG - 1466/U M39012/75-0004
a dia.	.087 (2,2)	.118 (3)
Assembly	M 02	M 02

STRAIGHT JACK



CABLE RG	178 B/U - 196 A/U	174 A/U - 188 A/U 179 B/U - 187 A/U
PART NUMBER	R 112 203	R 112 205
MIL no.	UG - 1462/U M39012/74-0003	UG - 1467/U M39012/74-0004
a dia.	.087 (2,2)	.118 (3)
Assembly	M 01	M 01

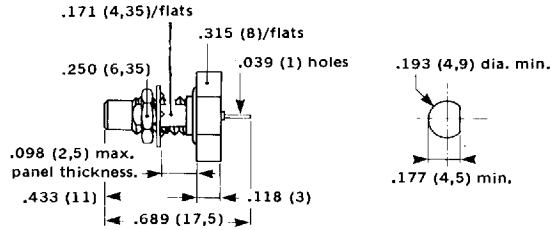
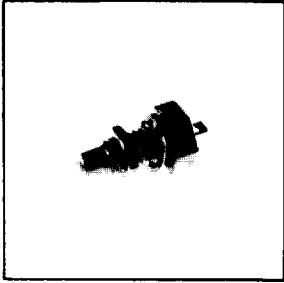
BULKHEAD JACK



CABLE RG	178 B/U - 196 A/U	174 A/U - 188 A/U 179 B/U - 187 A/U
PART NUMBER	R 112 303	R 112 305
MIL no.	UG - 1463/U M39012/76-0003	UG - 1468/U M39012/76-0004
a dia.	.087 (2,2)	.118 (3)
Assembly	M 01	M 01

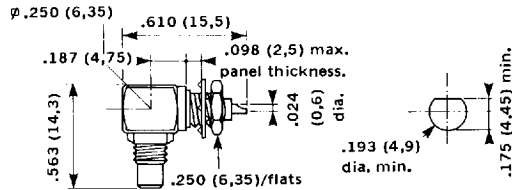
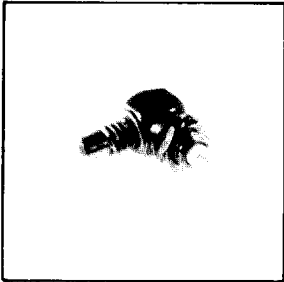
BULKHEAD RECEPTACLES

HERMETICALLY SEALED BULKHEAD RECEPTACLE FRONT NUT FIXING



PART NUMBER	R 112 603
MIL no.	M39012/78-0001

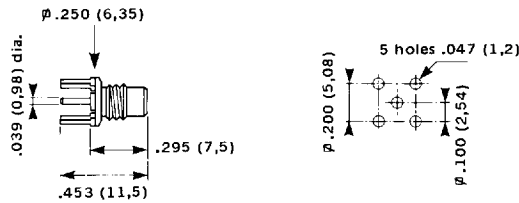
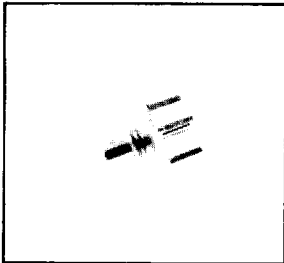
RIGHT ANGLE BULKHEAD RECEPTACLE



PART NUMBER	R 112 670
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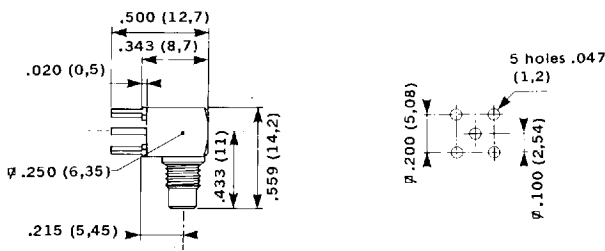
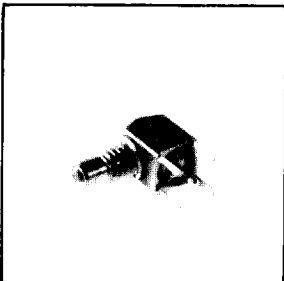
RECEPTACLES FOR PRINTED CIRCUIT BOARD MOUNTING

STRAIGHT PCB RECEPTACLE



PART NUMBER	R 112 426
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RIGHT ANGLE PCB RECEPTACLE

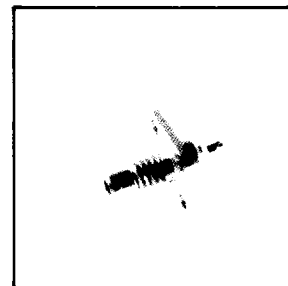
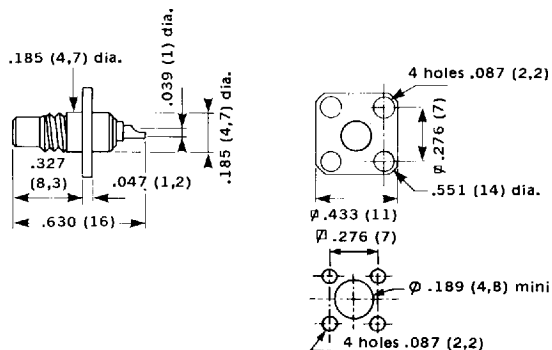


PART NUMBER	R 112 665
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SQUARE FLANGE RECEPTACLE

PART NUMBER

R 112 403



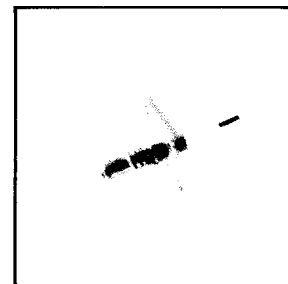
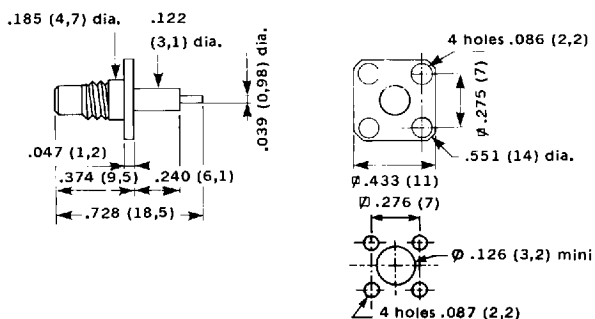
SQUARE FLANGE RECEPTACLE

PART NUMBER

R 112 413

Captive contact

NO + removable insulator



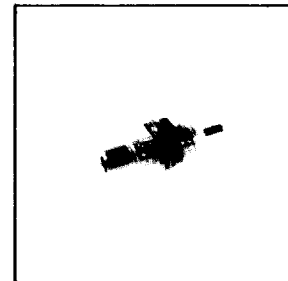
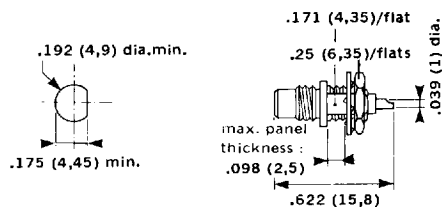
REAR NUT FIXING BULKHEAD RECEPTACLE

PART NUMBER

R 112 553

MIL no.

UG - 1464/U
M39012/77-0002



FRONT NUT FIXING BULKHEAD RECEPTACLE

PART NUMBER

R 112 554

MIL no.

UG - 1619/U
M39012/77-0001

