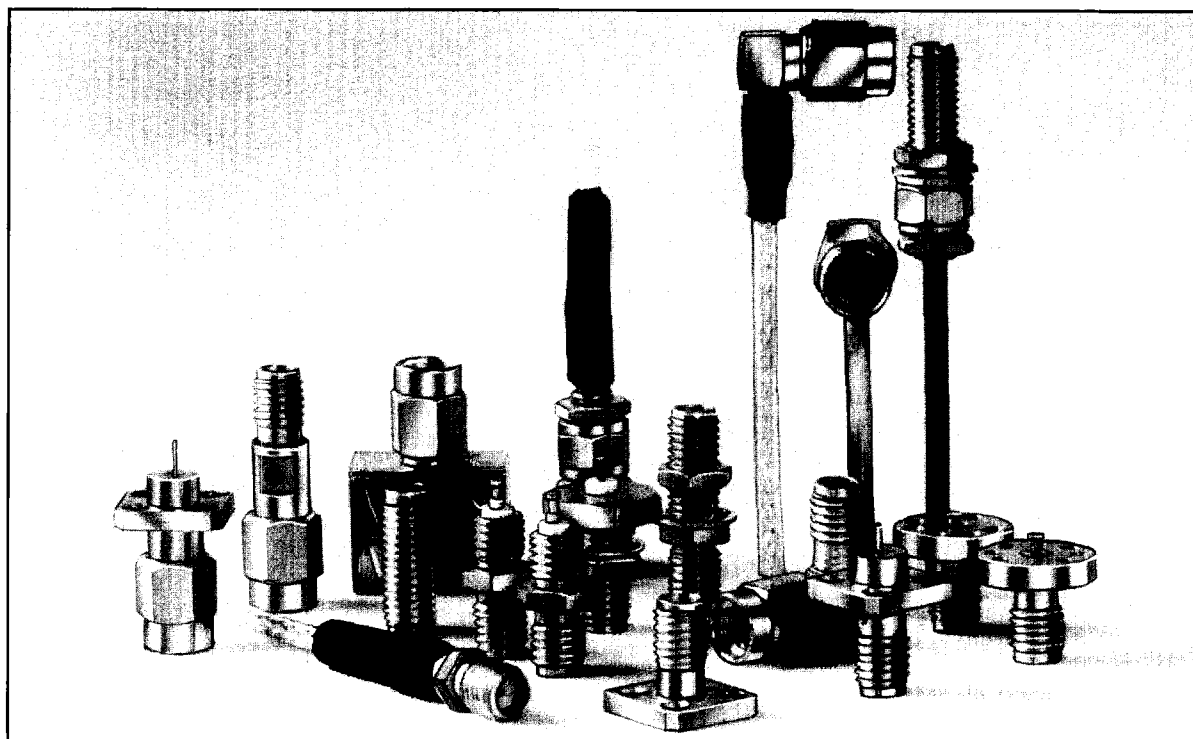


OSSM (SSMA)

Subminiature Coaxial Connectors



The success of the OSM (SMA) connector created a need for a smaller version for reduced packaging requirements. The OSSM (SSMA) series was designed to a size compatible with smaller diameter semi-rigid cable. The coupling thread is 10-36 UNS thread.

Design and Construction

As with the OSM series, all shell and body parts are made of stainless steel for ruggedness and long life. The dielectric is solid PTFE fluorocarbon. The center contacts are made of beryllium copper, gold plated.

Types

OSSM connectors are available for both semi-rigid and flexible coaxial cable. Panel and bulkhead mount, strip transmission line type, microstrip transmission type and hermetically sealed connectors and in-series adapters give designers complete flexibility for component and system design.

Upper Operating Frequency Limits

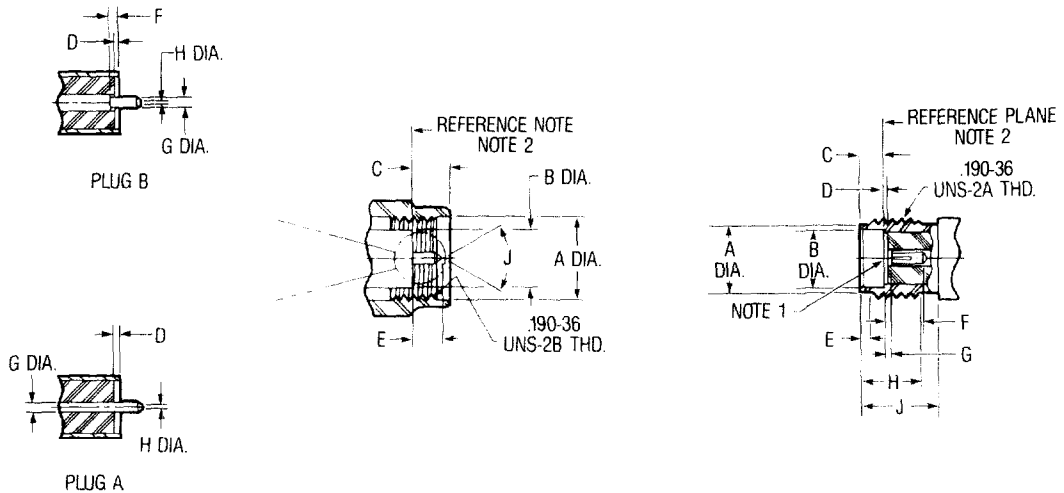
The standard OSSM series allows operation to 38.0 GHz. The extended frequency OSSM series allows high order mode free operation beyond 40.0 GHz. The extended frequency series directly mates with the standard OSSM series with minimum discontinuity.

Table of Contents

OSSM Interface Mating Dimensions	73
Specifications	74
Semi-Rigid Cable Type	75
.085 Dia.-Direct Solder Attachment	
Flexible Cable Type	77
Solder Attachment	
Crimp Attachment	
Panel and Bulkhead Mount Receptacles	79
Solder Pot Terminal	
Straight Terminal	
Tab Terminal	
Printed Circuit	
Strip Transmission Line	83
Microstrip Transmission Line	83
Hermetic Sealed Type	84
In-Series Adapters	87
40.0 GHz OSSM Connector Series	89

OSSM (SSMA)

Interface Mating Dimensions



PLUG

Letter	Inches (Millimeters) ³	
	Minimum	Maximum
A	.196 (4.98)	.202 (5.13)
B	.124 (3.15)	.1268 (3.221)
C	.100 (2.54)	.133 (3.38)
D	.000 (0.00)	.007 (0.25)
E	.050 (1.27)	.065 (1.65)
F	.000 (0.00)	.010 (0.25)
G	.0195 (0.495)	.0208 (0.528)
H	.000 (0.00)	.010 (0.25)
J	70°	95°

JACK

Letter	Inches (Millimeters) ³	
	Minimum	Maximum
A	.153 (3.89)	.160 (4.06)
B	.127 (3.23)	.130 (3.30)
C	.075 (1.91)	.077 (1.96)
D	.000 (0.00)	.007 (0.25)
E	.020 (0.51)	.040 (1.02)
F	.075 (1.91)	-
G	.000 (0.00)	.010 (0.25)
H	.190 (4.83)	.210 (5.33)
J	.230 (5.84)	-

+ .0008 + .0203
- .0005 - .0127

1. ID to meet VSWR and contact resistance when mated with .020 (0.51 mm) dia. pin.
2. When fully engaged, the two reference planes must coincide with metal to metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given for general information only.

OSSM (SSMA)

Specifications

Requirement	MIL-C-39012 Applicable Paragraph	Detail
General		
Material	3.3	Steel corrosion resistant per ASTM-A-582 and ASTM-A-484, Type 303. Beryllium copper per ASTM B 196. PTFE Fluorocarbon per ASTM-D-1457.
Finish	3.3.1	Center contacts shall be gold plated to a min. thickness of .00005 inch in accordance with MIL-G-45204, Typ I, Grade C. All other metal parts shall be finished as to provide a connector which meets the corrosion requirements.
Design	3.4	The design shall be such that the outline shown in this catalog and the interface dimensions of MIL-STD-348A are met.
Electrical		
Insulation Resistance	3.11	The insulation resistance shall not be less than 5,000 megohms.
Corona Level	3.22	The connector shall not exhibit breakdown when the voltage is 190 volts rms at 70,000 ft.
Dielectric Withstanding Voltage	3.17	The magnitude of the test voltage shall be 750 volts rms at sea level.
RF High Potential	3.23	The withstanding voltage is 500 volts rms at 5 MHz. Leakage current is not applicable.
Contact Resistance	3.16	Center contact resistance: 2 milliohms max. Outer contact resistance: 2 milliohms max.
VSWR	3.14	Refer to applicable military slash sheet or consult factory. Frequency range dependent on cable used.
RF Leakage	3.26	Refer to applicable military slash sheet or consult factory.
Insertion Loss	3.27	Refer to applicable military slash sheet or consult factory. Frequency range dependent on cable used.
Mechanical		
Force to Engage	3.5.1	The torque required to engage and disengage shall not exceed 2 in.-lbs. The longitudinal force is not applicable.
Coupling Nut Retention	3.25	60 lbs. min. Applicable for plug connectors only.
Coupling Proof Torque	3.6	5 in.-lbs. min. Applicable for plug connectors only.
Cable Retention	3.24	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	3.7	Applicable to jack connectors only. Reference MIL-STD-348A for dimensions; oversize pin .021 min. dia., .045 deep; insertion force 3 lbs. max. with .0208 min. dia. pin; withdrawal force 1 oz. min. with .0195 max. dia. pin.
Connector Durability	3.15	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and shall meet the mating characteristic requirements.
Recommended Mating Torque	—	5 in.-lbs.
Environmental		
Vibration	3.18	Specification MIL-STD-202, method 204, test condition D.
Shock	3.19	Specification MIL-STD-202, method 213, test condition I.
Thermal Shock	3.20	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	3.13	Specification MIL-STD-202, method 101, test condition B.
Moisture Resistance	3.21	Specification MIL-STD-202, method 106. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes of removal from humidity.

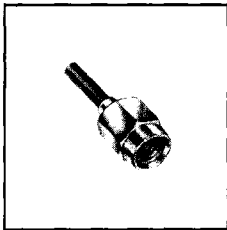
OSSM (SSMA)

For Semi-Rigid Cable

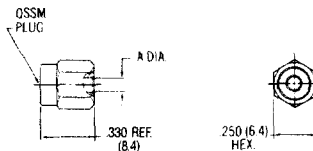
OSSM Subminiature connectors for semi-rigid cable meet performance requirements for microwave and other applications where reduced size and higher packaging density is important. The OSSM series can operate with excellent electrical characteristics at all frequencies up to 38 GHz. High frequency 40.0 GHz series is available.

OSSM connectors are available for use on .085 O.D. and other sizes of semi-rigid cable. Connectors for use with .070 and .047 inch diameter semi-rigid cable are also available. Contact factory for details.

.085 Dia. Direct Solder Attachment

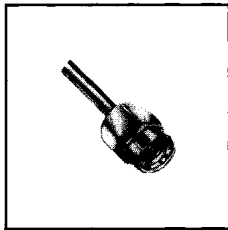


**Straight Cable Plug
Without Center Contact
DC-40.0 GHz**

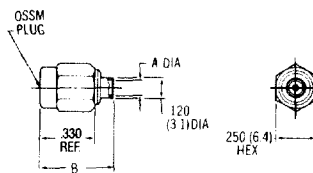


Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1001-7985-02
Dim. A	Inches (mm) .085 Min. (2.2)

Finish: Passivated stainless steel. For gold plated coupling nut, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.

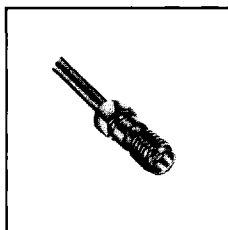


**Straight Cable Plug
With Center Contact**

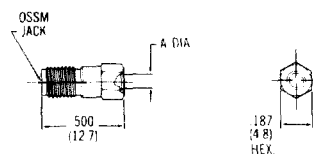


Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1001-5004-02
Dim. A	Inches (mm) .085 Min. (2.2)
Dim. B	.447 Ref. (11.4)

Finish: Passivated stainless steel. For gold plated coupling nut, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.



**Straight Cable Jack
With Center Contact**



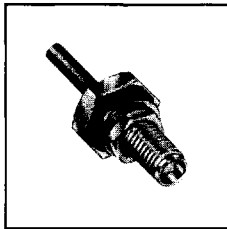
Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1002-7985-00
Dim. A	Inches (mm) .085 Min. (2.2)

Finish: Gold plate. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.

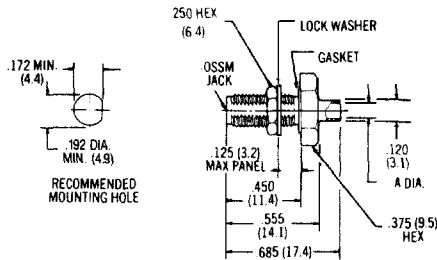
OSSM (SSMA)

For Semi-Rigid Cable

.085 Dia. • Direct Solder Attachment

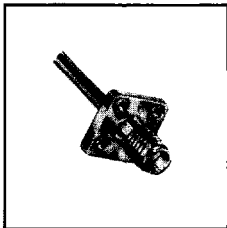


Bulkhead Feedthrough Cable Jack

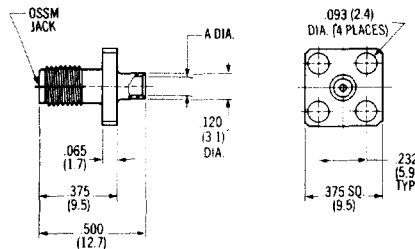


Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1004-7985-00
Dim. A	Inches (mm) .0875 Min. (2.2)

Finish: Gold plate. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.

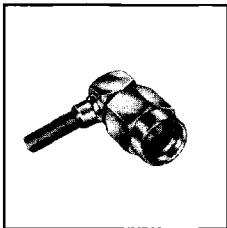


Flange Mount Cable Jack

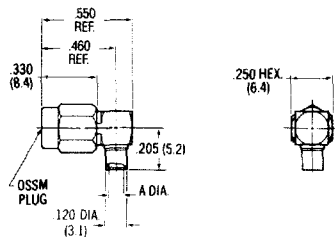


Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1006-7985-00
Dim. A	Inches (mm) .0875 Min. (2.2)

Finish: Gold plate. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.



Right Angle Cable Plug*



Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1007-7985-02
Dim. A	Inches (mm) .0875 Min. (2.2)

Finish: Passivated stainless steel. For gold plated coupling nut, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section. *Contact captivation per U.S. patent number 3,292,117.

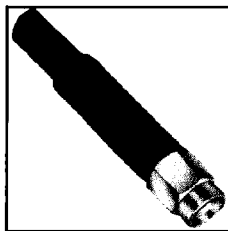
OSSM (SSMA)

For Flexible Cable

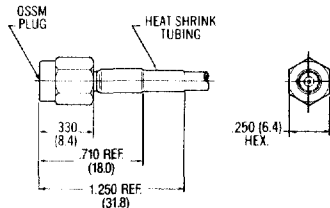
OSSM (SSMA) subminiature coaxial connectors for flexible cable are designed for use on small size (e.g. RG-196A/U and RG-316/U) flexible cable. Flexible cable

assemblies can be utilized in areas where the high performance of semi-rigid cable is not required but high cable flexibility is needed.

Flexible Cable • Solder Attachment

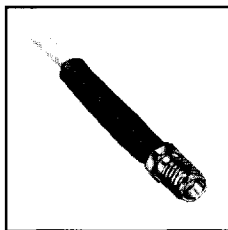


Straight Cable Plug

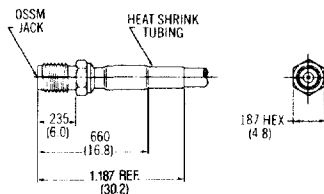


Non-Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1031-5001-02	1031-5002-02

Finish: Passivated stainless steel. For gold plated coupling nut, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

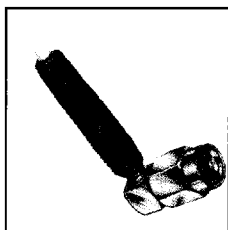


Straight Cable Jack

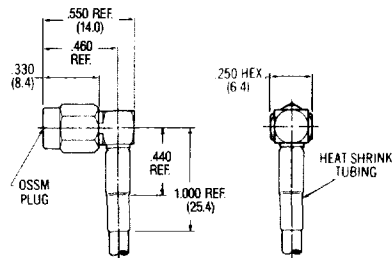


Non-Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1032-5001-00	1032-5002-00

Finish: Gold plated. Inner housing that is soldered to cable is gold plated.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.



Right Angle Cable Plug



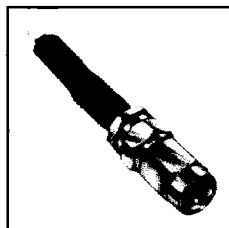
Captured Contact*		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1037-5001-02	1037-5002-02

Finish: Passivated stainless steel. For gold plated coupling nut, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.
*Contact captivation per U.S. patent number 3,292,117.

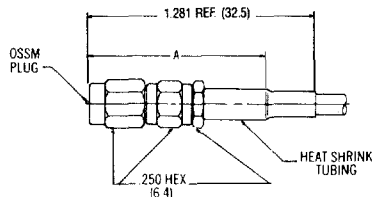
OSSM (SSMA)

For Flexible Cable

Flexible Cable • Crimp Attachment

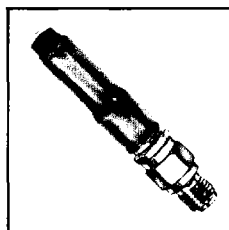


Straight Cable Plug

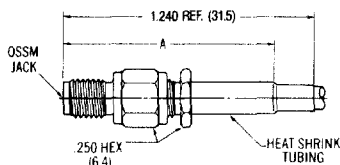


Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1031-7196-02	1031-7188-02
Dim. A	Inches (mm) .937 REF. (23.8)	Inches (mm) 1.062 REF. (27.0)

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

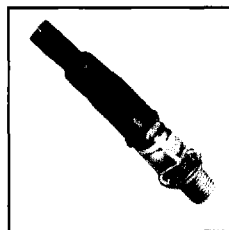


Straight Cable Jack

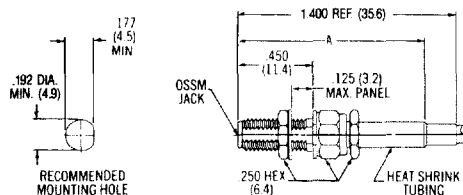


Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1032-7196-02	1032-7188-02
Dim. A	Inches (mm) .900 REF. (22.9)	Inches (mm) 1.025 REF. (26.0)

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

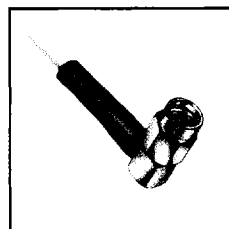


Bulkhead Feedthrough Cable Jack

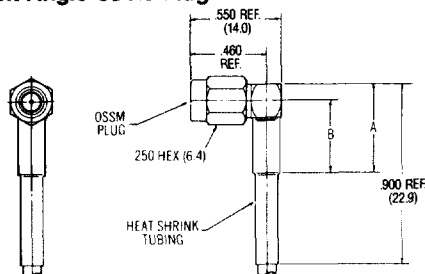


Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1034-7196-02	1034-7188-02
Dim. A	Inches (mm) 1.050 REF. (26.7)	Inches (mm) 1.180 REF. (30.0)

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00. Inner housing that is soldered to cable is gold plated.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.



Right Angle Cable Plug



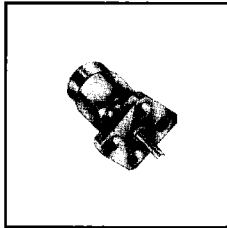
Captured Contact		
Cable	RG 178/U, 196	RG 174/U, 179, 187, 188, 316
Part Number	1037-7196-02	1037-7188-02
Dim. A	Inches (mm) .500 REF. (12.7)	Inches (mm) .625 REF. (15.9)
Dim. B	.400 REF. (10.2)	.525 REF. (13.3)

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

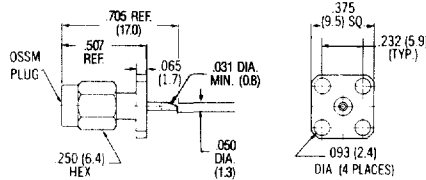
OSSM (SSMA)

Panel Mount Receptacles

Solder Pot Terminal

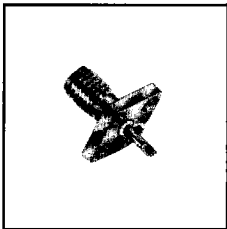


Flange Mount Plug Receptacle

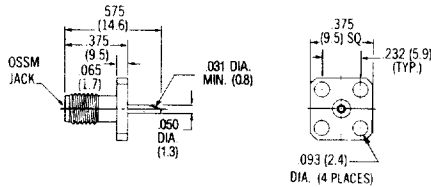


Captured Center Contact* Solder Pot Terminal	
Part Number	1051-0000-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

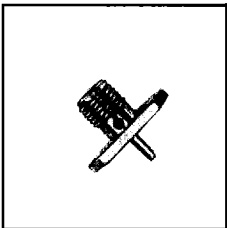


Flange Mount Jack Receptacle

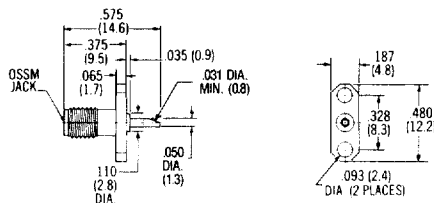


Captured Center Contact* Solder Pot Terminal	
Part Number	1052-0000-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

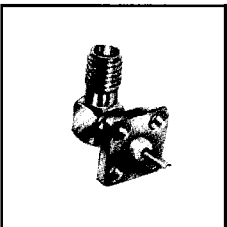


Flange Mount Jack Receptacle

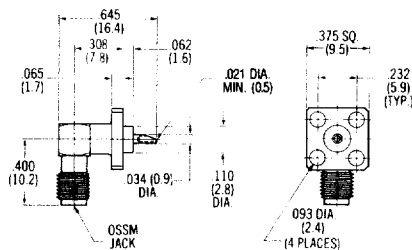


Captured Center Contact* Solder Pot Terminal	
Part Number	1052-1300-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.



Flange Mount Jack Receptacle



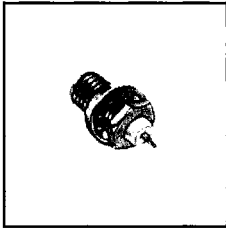
Captured Center Contact Solder Pot Terminal	
Part Number	1054-5005-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.

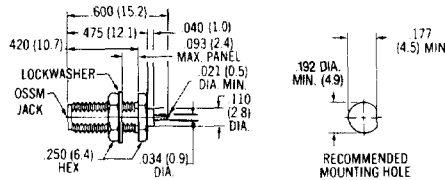
OSSM (SSMA)

Bulkhead Mount Receptacles

Solder Pot Terminal

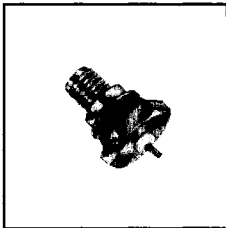


Bulkhead Feedthrough Jack Receptacle

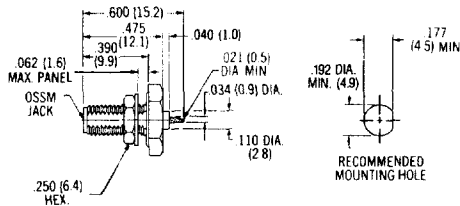


Captured Center Contact* Solder Pot Terminal Rear Mount	
Part Number	1056-0000-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.



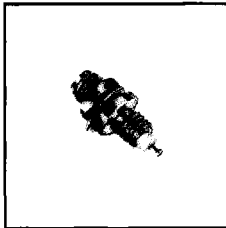
Bulkhead Feedthrough Jack Receptacle



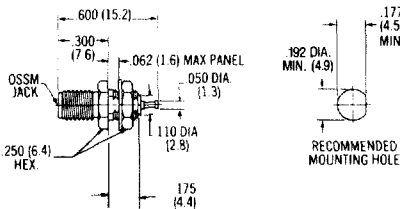
Captured Center Contact* Solder Pot Terminal (With "O" Ring) Rear Mount	
Part Number	1056-1100-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

Turret Terminal



Bulkhead Feedthrough Jack Receptacle



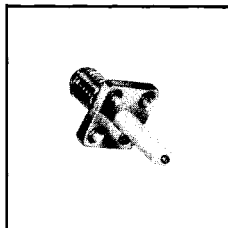
Captured Center Contact* Turret Terminal Front Mount	
Part Number	1058-0000-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

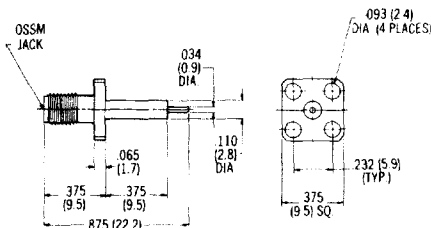
OSSM (SSMA)

Panel Mount Receptacles

Straight Terminal

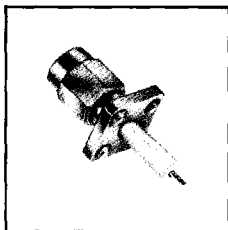


Flange Mount Jack Receptacle

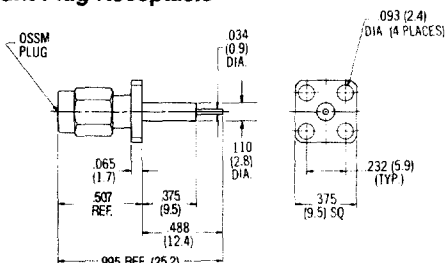


Non-Captured Center Contact Straight Terminal	
Part Number	1052-1200-02
Captured Center Contact* Straight Terminal	
Part Number	1052-1201-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.



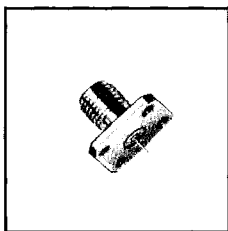
Flange Mount Plug Receptacle



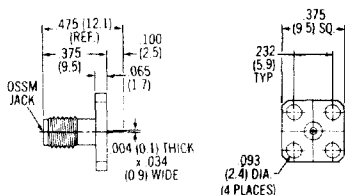
Non-Captured Center Contact Straight Terminal	
Part Number	1051-1200-02
Captured Center Contact* Straight Terminal	
Part Number	1051-1201-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

Tab Terminal

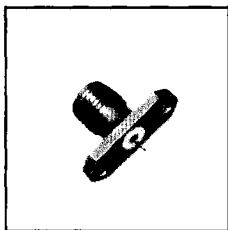


Flange Mount Jack Receptacle

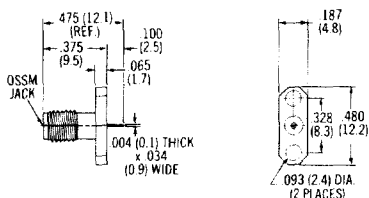


Non-Captured Center Contact Tab Terminal	
Part Number	1052-5004-02
Captured Center Contact* Tab Terminal	
Part Number	1052-5005-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.



Flange Mount Jack Receptacle

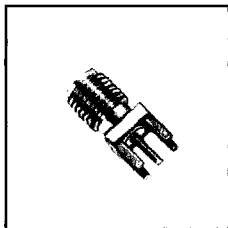


Non-Captured Center Contact Tab Terminal	
Part Number	1052-1302-02
Captured Center Contact* Tab Terminal	
Part Number	1052-1303-02

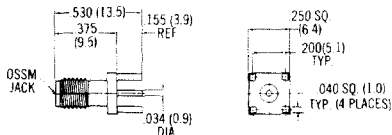
Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
*Contact captivation per U.S. patent number 3,292,117.

OSSM (SSMA)

Printed Circuit Boards

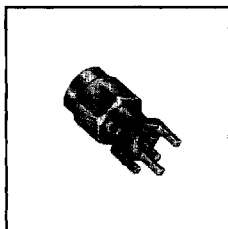


Straight Jack

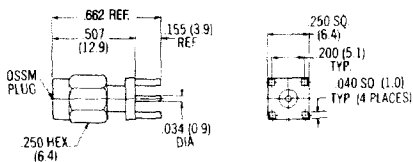


Captured Center Contact Straight Terminal	
Part Number	1062-0000-00

Finish: Gold plate.

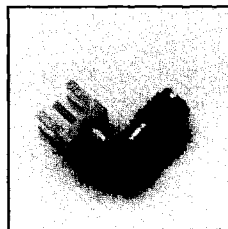


Straight Plug

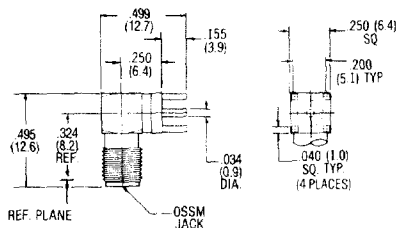


Captured Center Contact Straight Terminal	
Part Number	1063-0000-00

Finish: Gold plate.



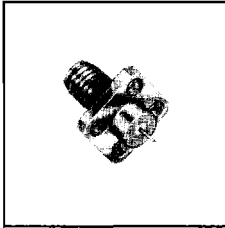
Right Angle Jack



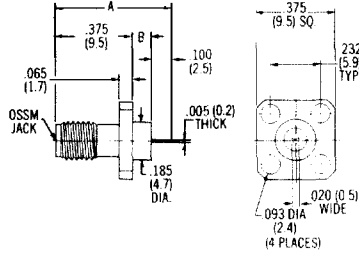
Captured Center Contact Straight Terminal	
Part Number	1064-0000-00

OSSM (SSMA)

Microstrip Transmission Line Circuits

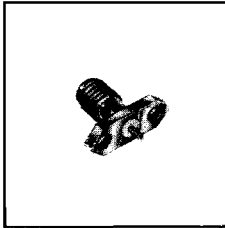


Flange Mount Jack

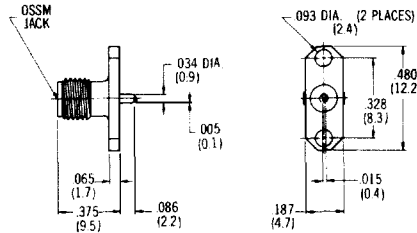


Captured Center Contact* Tab Terminal			
Part Number	1052-1131-00	1052-1132-00	1052-1133-00
Dim. A	Inches (mm) .568 REF. (14.5)	Inches (mm) .600 REF. (15.2)	Inches (mm) .662 REF. (16.8)
Dim. B	.093 REF. (2.4)	.125 REF. (3.2)	.187 (4.8)

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to 02.
*Contact captivation per U.S. patent number 3,292,117.



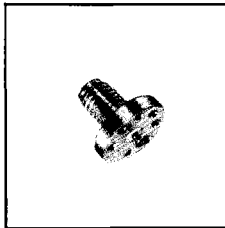
Flange Mount Jack



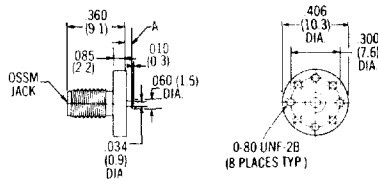
Captured Center Contact* Solderless Compression Terminal	
Part Number	1052-5013-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to 02.
*Contact captivation per U.S. patent number 3,292,117.

Surface Launch Use On Strip Transmission Line Circuits

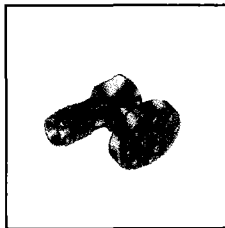


Surface Launch Jack

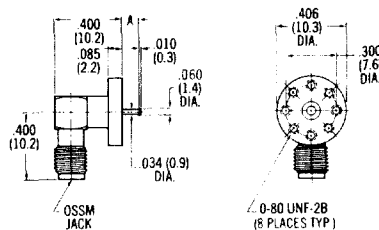


Non-Captured Center Contact Turret Terminal		
Stripline Size	1/16	1/8
Part Number	1066-1321-00	1066-1322-00
Dim. A	Inches (mm) .031 (0.8)	Inches (mm) .063 (1.6)

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to 02.



Surface Launch Right Angle Jack



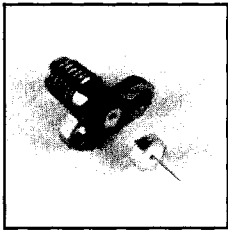
Plug In Turret Terminal		
Stripline Size	1/16	1/8
Part Number	1068-1321-00	1068-1322-00
Dim. A	Inches (mm) .031 (0.8)	Inches (mm) .063 (1.6)

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to 02.

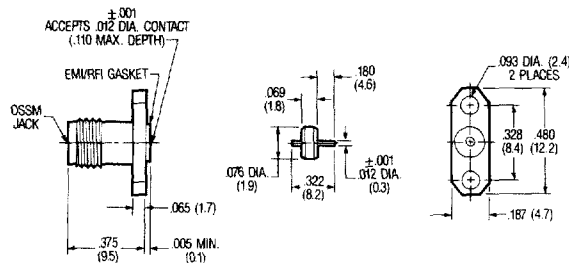
OSSM (SSMA)

Hermetically Sealed

Metal-To-Metal Hermetic Seal

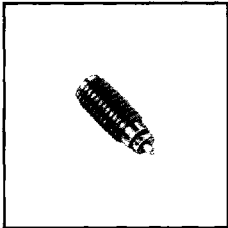


Jack Receptacle With EMI/RFI Gasket

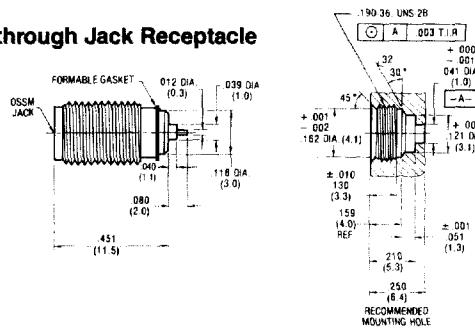


Field Replaceable Solder and Braze-In VSWR (GHz): 1.07 + .011f RF Leakage (dB): -(100 - fGHz)	
Part Number	1052-3355-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Refer to recommended assembly tools in Tool Section.

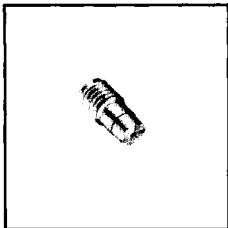


Feedthrough Jack Receptacle

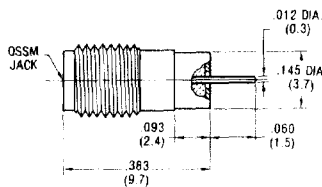


Formable Gasket VSWR (GHz): 1.05 + .01f RF Leakage (dB): -(100 - fGHz)	
Part Number	1058-5014-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. For nickel plate, change the suffix from -00 to -10.
Installation Thermal Limit: 250°C
Refer to recommended assembly tools in Tool Section.

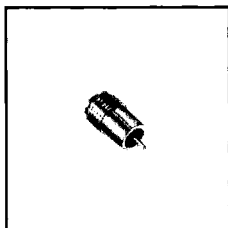


Feedthrough Jack Receptacle

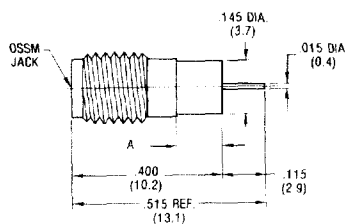


Solder and Braze-In VSWR (GHz): 1.05 + .014f RF Leakage (dB): -(100 - fGHz)	
Part Number	1058-3203-00

Finish: Gold plate.
This unit has a unique self-matching compensation step, allowing direct attachment to the substrate, resulting in minimal package size.



Panel Feedthrough Jack Receptacle



Solder and Braze-In VSWR (GHz): 1.05 + .014f RF Leakage (dB): -(70 - fGHz)	
Part Number	Dimension A
1058-3121-00	Inches (mm) .093 (2.4)
1058-3122-00	.125 (3.2)
1058-3123-00	.187 (4.8)

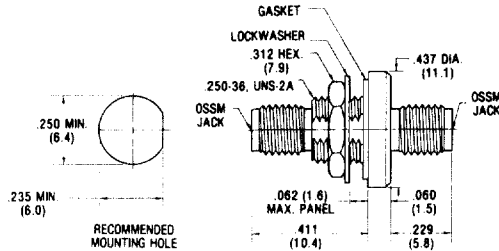
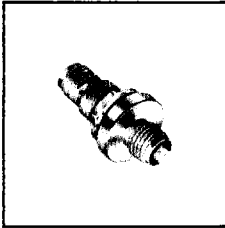
Finish: Gold plate.

OSSM (SSMA)

Hermetically Sealed

Panel Feedthrough Hermetic Adapter

Jack to Jack

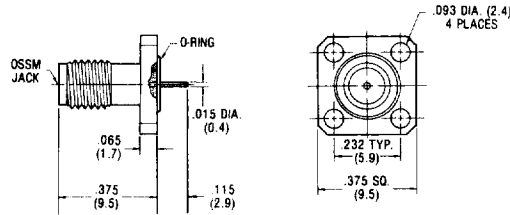
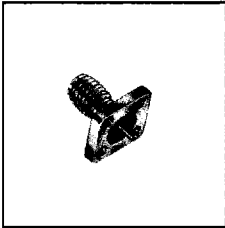


VSWR (GHz): 1.10 + .01f	
RF Leakage (dB): -(100 - fGHz)	
Part Number	1084-1100-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02.

O-Ring Gasket Hermetic Seal

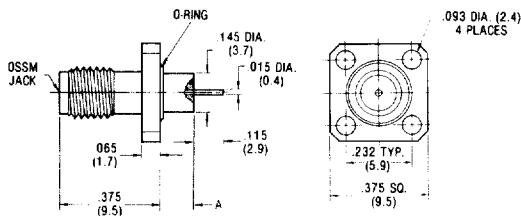
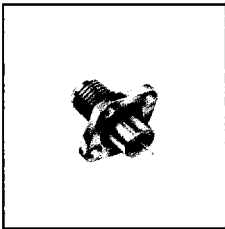
Flange Mount Jack Receptacle



VSWR (GHz): 1.05 + .014f	
RF Leakage (dB): -(70 - fGHz)	
Part Number	1052-3100-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. On passivated versions (-02), pins are pre-tinned using Sn60 solder.

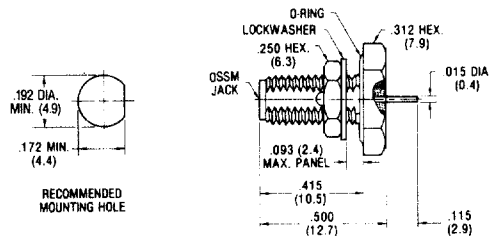
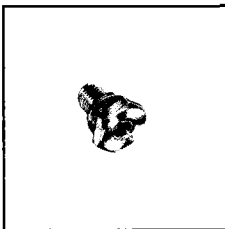
Flange Mount Jack Receptacle



VSWR (GHz): 1.05 + .01f	
RF Leakage (dB): -(70 - fGHz)	
Part Number	Dimension A
1052-3121-00	Inches (mm)
1052-3122-00	.093 (2.4)
1052-3123-00	.125 (3.2)
	.187 (4.8)

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. On passivated versions (-02), pins are pre-tinned using Sn60 solder.

Rear Mount Jack Receptacle



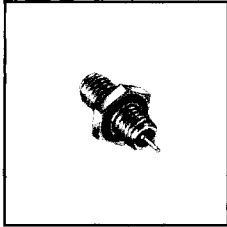
VSWR (GHz): 1.05 + .014f	
RF Leakage (dB): -(70 - fGHz)	
Part Number	1056-3100-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. On passivated versions (-02), pins are pre-tinned using Sn60 solder.

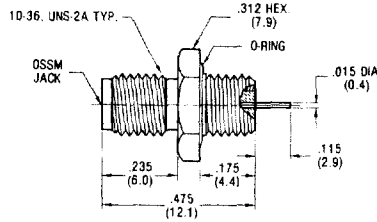
OSSM (SSMA)

Hermetically Sealed

O-Ring Gasket Hermetic Seal

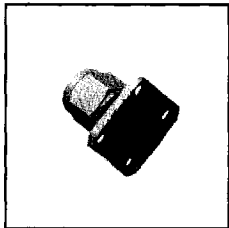


Bulkhead Feedthrough Front Mount Jack Receptacle

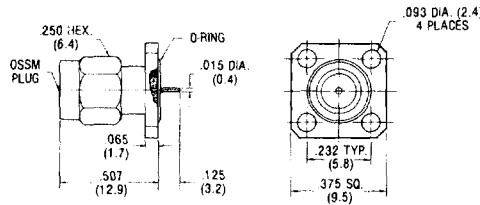


VSWR (GHz): 1.05 + .01f
RF Leakage (dB): -(70 - fGHz)
Part Number: 1058-3100-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. On passivated versions (-02), pins are pre-tinned using Sn60 solder.



Flange Mount Plug Receptacle

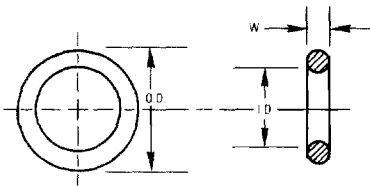


VSWR (GHz): 1.05 + .014f
RF Leakage (dB): -(70 - fGHz)
Part Number: 1051-3100-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02. On passivated versions (-02), pins are pre-tinned using Sn60 solder.

Selection Guides

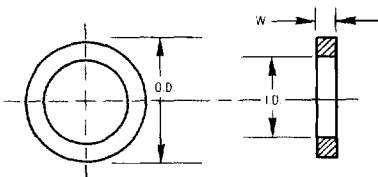
O-Ring (Elastomer)



Part Number	Actual Size (Inches)					Fractional Reference		
	I.D.	±Tol.	W.	±Tol.	Mean O.D. (Ref.)	I.D.	O.D.	W.
2098-3300-54	.146	.005	.031	.005	.203	9/64	13/64	1/32
2098-3327-54	.204	.005	.070	.005	.344	13/64	11/32	1/16
1098-3205-54	.208	.005	.030	.005	.266	7/32	17/64	1/32
2098-3328-54	.239	.005	.051	.005	.341	15/64	11/32	1/2
2098-3326-54	.239	.005	.070	.005	.375	1/4	3/8	1/16
2098-3307-54	.245	.005	.045	.005	.335	1/4	21/64	3/64
2098-3325-54	.275	.005	.040	.005	.355	9/32	23/64	13/32
2098-3265-54	.301	.005	.070	.005	.438	5/16	7/16	1/16

Additional o-rings available. Consult factory.

Gasket

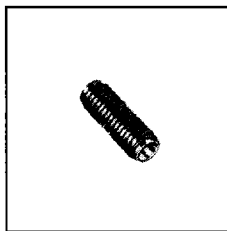


Part Number	Actual Size (Inches)					Fractional Reference		
	I.D.	±Tol.	W.	±Tol.	O.D. ±Tol.	I.D.	O.D.	W.
1098-3204-54	.125	.003	.025	.003	.196 + .002 - .003	1/8	13/64	1/32
2098-3282-54	.173	.002	.025	.002	.234	11/64	15/64	1/32
1098-3203-54	.250	.005	.062	.005	.375	1/4	3/8	5/8

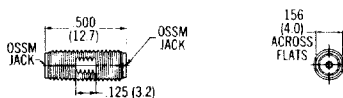
Additional gaskets available. Consult factory.

OSSM (SSMA) In-Series Adapters

OSSM (SSMA) in-series adapters are used to join various combinations of SSMA connectors and also to feed circuits through bulkheads and panels with single-hole mounting. All have captured center contacts.

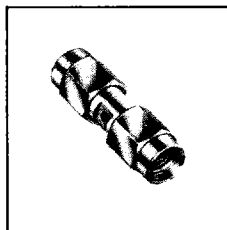


Jack to Jack Adapter

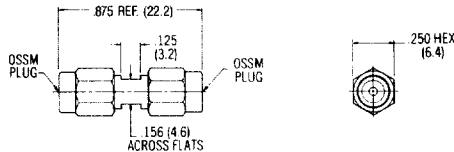


Part Number	1080-0000-02
--------------------	---------------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Contact captivation per U.S. patent 3,292,117.

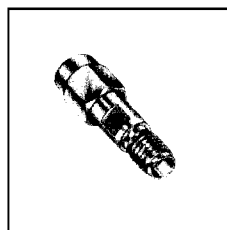


Plug to Plug Adapter

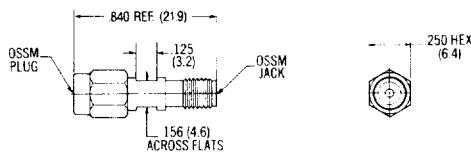


Part Number	1081-0000-02
--------------------	---------------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Contact captivation per U.S. patent 3,292,117.



**Plug to Jack Adapter
(Connector Saver)**

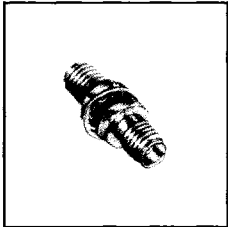


Part Number	1082-0000-02
--------------------	---------------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
Contact captivation per U.S. patent 3,292,117.

OSSM (SSMA)

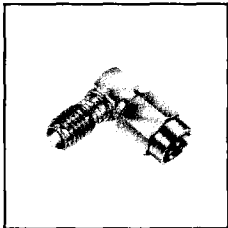
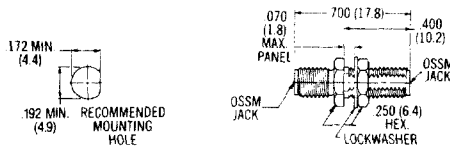
In-Series Adapters



Bulkhead Mount Jack to Jack Adapter

Part Number	1084-0000-02
--------------------	---------------------

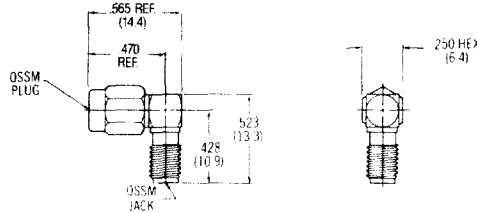
Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
 Contact captivation per U.S. patent 3,292,117.



Right Angle Plug to Jack Adapter

Part Number	1088-0000-02
--------------------	---------------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.



OSSM (SSMA)

High Frequency For Semi-Rigid Cable

These OSSM connectors operate from dc to 40 GHz. The mating interface is identical to the popular OSSM standard. The internal design has been modified to eliminate the propagation of higher order modes below 40 GHz. The standard OSSM connectors will mate with these connectors with minimum discontinuity. The center contact is supported along its entire length by PTFE fluorocarbon dielectric.

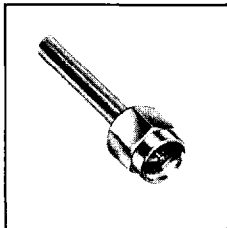
Male connectors are available in both the cable adapter type, where the center conductor of the cable is the center contact of the connector, and the solder on center contact type.

The connector construction is identical to the OSSM series which has a .190-36 UNS thread, stainless steel body and/or nut, and beryllium copper heat treated center conductors which are gold plated. Applications include stripline, microstrip, semi-rigid cables, waveguide adapters, IC packages, systems, components, etc.

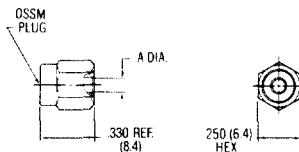
Specifications

Nominal Impedance: 50 ohms
 Frequency Range: dc to 40 GHz
 Voltage Standing Wave Ratio: $1.07 + .010 f \text{ (GHz)}$
 Insertion Loss: $.04 \times \sqrt{f \text{ (GHz)}} = \text{dB max.}$
 Voltage Rating: 250 volts RMS max. working voltage

.085 and .070 Dia. • Direct Solder Attachment

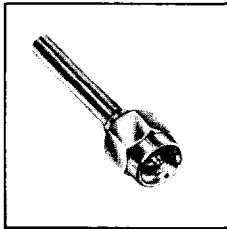


Straight Cable Plug
Without Center Contact

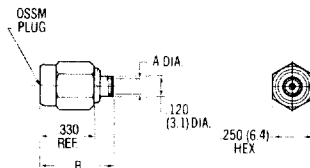


Cable	RG 405/U (.085)
Cable Dielectric	Solid PTFE
Part Number	1001-7985-00
Dim. A	Inches (mm) .0875 Min. (2.2)

Finish: Gold plate. For passivated stainless steel coupling nut, change the Part Number suffix from -00 to -02. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.

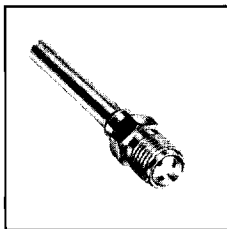


Straight Cable Plug
Center Contact

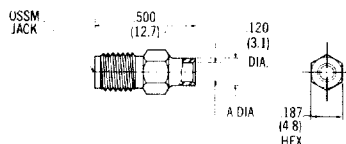


Cable	RG 405/U (.085)	.070 Dia.
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	1401-7985-00	1401-7970-00
Dim. A	Inches (mm) .0875 Min. (2.2)	Inches (mm) .072 Min. (1.8)
Dim. B	447 Ref. (11.4)	425 Ref. (10.8)

Finish: Gold plate. For passivated stainless steel coupling nut, change the Part Number suffix from -00 to -02. Inner housing that is soldered to cable is gold plated. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.



Straight Cable Jack



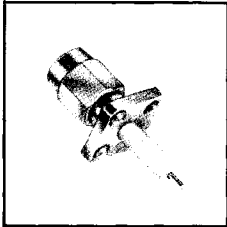
Cable	RG 405/U (.085)	.070 Dia.
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	1402-7985-00	1402-7970-00
Dim. A	Inches (mm) .0875 Min. (2.2)	Inches (mm) .072 Min. (1.8)

Finish: Gold plate. Refer to Appendix for Coaxial Cable Characteristics. Refer to recommended assembly tools in Tool Section.

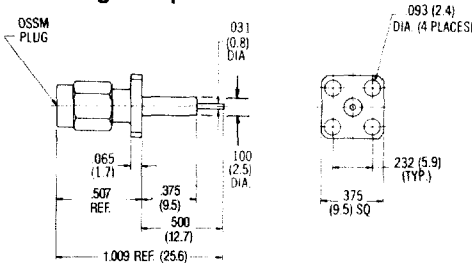
OSSM (SSMA)

High Frequency

Panel Mount • Straight Terminal

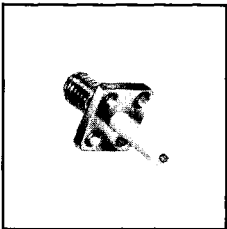


Flange Mount Plug Receptacle

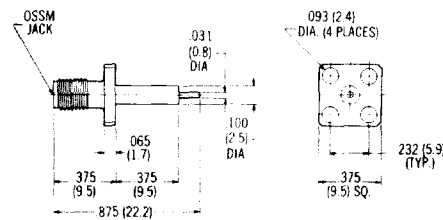


Non-Captured Center Contact	
Part Number	1451-1200-02
Captured Center Contact*	
Part Number	1451-1201-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
* Contact captivation per U.S. patent number 3,292,117.



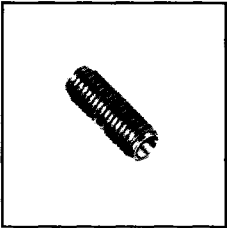
Flange Mount Jack Receptacle



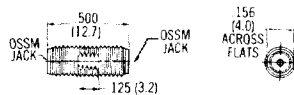
Non-Captured Center Contact	
Part Number	1452-1200-02
Captured Center Contact*	
Part Number	1452-1201-02

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
* Contact captivation per U.S. patent number 3,292,117.

In-Series Adapters

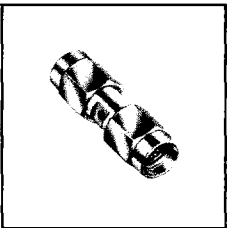


Jack to Jack Adapter

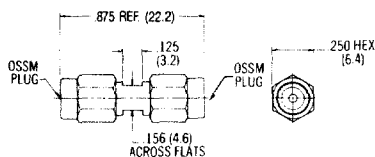


Part Number	1480-0000-02
-------------	--------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
* Contact captivation per U.S. patent number 3,292,117.



Plug to Plug Adapter



Part Number	1481-0000-02
-------------	--------------

Finish: Passivated stainless steel. For gold plate, change the Part Number suffix from -02 to -00.
* Contact captivation per U.S. patent number 3,292,117.