

OSM (SMA)

For Semi-Rigid Cable

OSM Miniature connectors for semi-rigid cable represent the industry's largest selection of custom and standard products for RF and microwave applications using semi-rigid cable. Connectors are available for all cable sizes.

The direct solder attachment produces highly reliable high performance cable assemblies especially suited for microwave system applications. The solder attachment is suitable for applications ranging from lab work to full scale mechanized production.

There are four basic approaches to the OSM designs. Connectors such as the 2001-5009-02, 2001-5032-02 and 2001-5119-02 are provided with separate solder-on contacts of gold plated beryllium copper. Center contact attachment to the cable inner conductor is made prior to cable attachment. This contact then provides a highly reliable wear resistant center conductor for applications where repeated matings will occur. For connectors such as the 2001-7585-02, 2002-7541-00 and 2004-7585-00, a

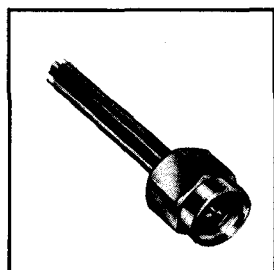
heat treated spring finger socket receptacle contact is mechanically captured to the connector assembly allowing the user to point the inner conductor of the cable and plug it into a wear resistant center contact of the connector. Connectors such as the 2001-7941-02, 2001-5025-02 and 2001-5031-02 utilize the trimmed and pointed cable inner conductor as the connector center contact pin.

In addition, there is a complete series of solderless compression crimp connectors where attachment to the outer jacket of the cable is accomplished using unique crimp tools.

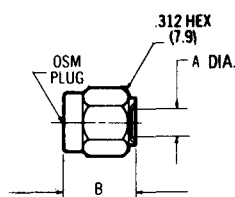
All connectors supplied with center contacts are supported by a PTFE fluorocarbon dielectric.

All plug connectors can be provided with a variety of coupling nut arrangements including retractable, low profile and wire lock styles.

.085 and .141 Dia. • Direct Solder Attachment

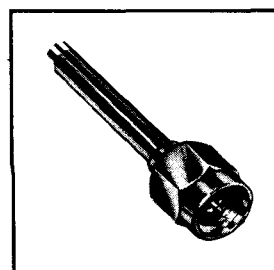


Straight Cable Plug

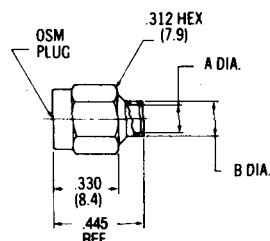


Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2001-7941-02 Without Contact	2001-5009-02 With Contact
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.330 Ref. (8.4)	.440 Ref. (11.2)

Finish: Housing is gold plated in all cases. Coupling nut is passivated stainless steel. For gold plated coupling nut, 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 Plug



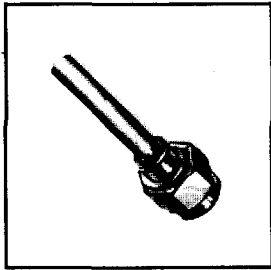
Cable	RG 402/U (.141)	RG 405/U (.085)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE	Solid PTFE
Part Number	2001-5031-02 Without Contact	2001-5032-02 With Contact	2001-7585-02 With Mechanically Captured Contact
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)	Inches (mm) .089 Min. (2.3)
Dim. B	.180 Ref. (4.6)	.120 Ref. (3.0)	.120 Ref. (3.0)

Finish: Housing is gold plated in all cases. Coupling nut is passivated stainless steel. For gold plated coupling nut, change the part number suffix from -02 to -00.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

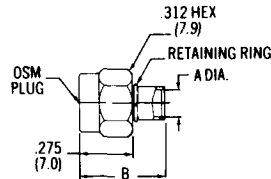
OSM (SMA)

For Semi-Rigid Cable

.085 and .141 Dia. • Direct Solder Attachment

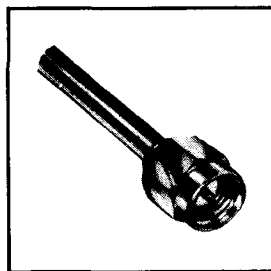


**Straight Cable Plug
Retractable Coupling Nut**

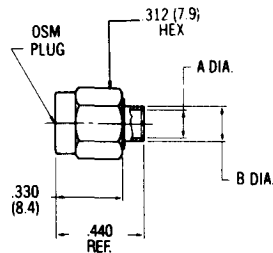


Cable	RG 402/U (.141)	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE	Solid PTFE
Part Number	2001-5025-02 Without Contact	2001-5068-02 Without Contact	2001-5119-02 With Contact
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.440 Ref. (11.2)	.330 Ref. (8.4)	.530 Ref. (13.5)

Finish: Housing is gold plated in all cases. Coupling nut is passivated stainless steel. For gold plated coupling nut, change the part number suffix from -02 to -00.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.

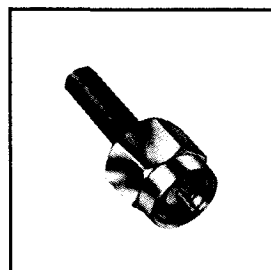


**Straight Cable Plug
With Center Contact**

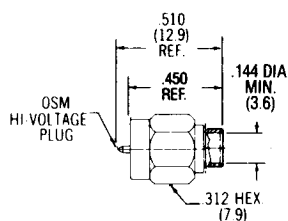


Cable	RG 402/U (.141)	.141	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Microporous PTFE	Solid PTFE
Part Number	2001-5003-02	2001-7943-02	2001-7985-02
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.180	.180 Ref. (4.6)	.120 Ref. (3.0)

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

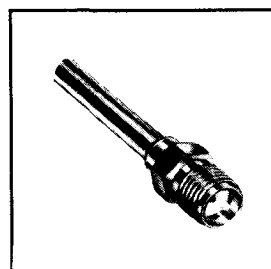


**Straight Cable Plug
High Voltage**

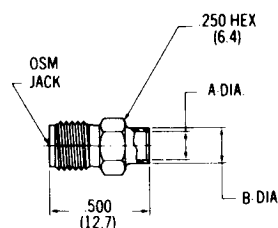


Cable	RG 402/U (.141)
Cable Dielectric	Solid PTFE
Part Number	2001-5246-00

Finish: Gold plate. For passivated stainless steel, change the Part Number suffix from -00 to -02.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.
Interface does not conform to catalog dimensions or MIL-STD-348



Straight Cable Jack



Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2002-5015-00 With Contact	2002-5016-00 With Contact
	2002-7541-00 With Mechanically Captured Contact	2002-7585-00 With Mechanically Captured Contact
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.180 Ref. (4.6)	.120 Ref. (3.0)

* Overall length of 2002-7585-00 is .625

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

M/A-COM, Inc.

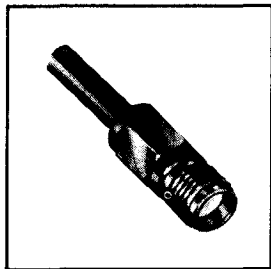
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North America: Tel. (800) 366-2266
Fax (800) 618-8883

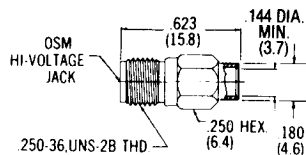
Asia/Pacific: Tel. +81 (03) 3226-1671
Fax +81 (03) 3226-1451

Europe: Tel. +44 (1344) 869 595
Fax +44 (1344) 300 020

.085 and .141 Dia. • Direct Solder Attachment

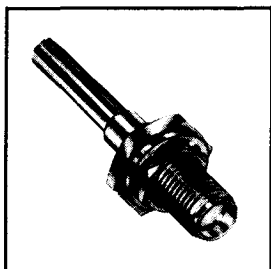


Straight Cable Jack
High Voltage

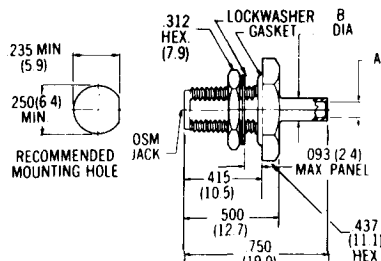


Cable	RG 402/U (.141)
Cable Dielectric	Solid PTFE
Part Number	2002-5070-00

Finish: Gold plate.
Refer to Appendix for Coaxial Cable Characteristics.
Refer to recommended assembly tools in Tool Section.
Interface does not conform to catalog dimensions or MIL-STD-348

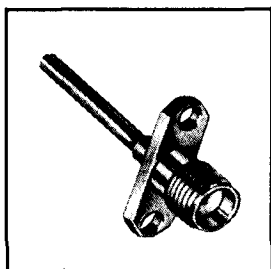


Bulkhead Feedthrough Cable Jack

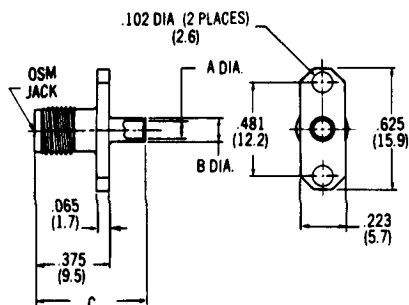


Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2004-7941-00 2004-7541-00 With Mechanically Captured Contact	2004-7985-00 2004-7585-00 With Mechanically Captured Contact
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.180 (4.6)	.120 (3.0)

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

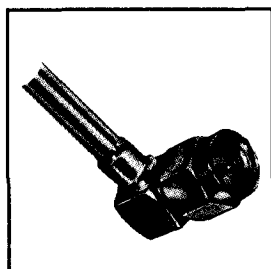


Flange Mount Cable Jack

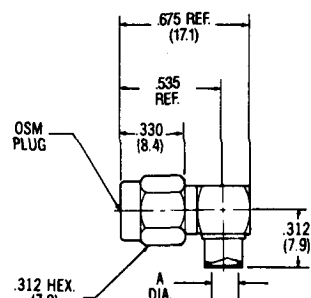


Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2006-5013-00	2006-5010-00
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.180 (4.6)	.120 (3.0)
Dim. C	.560 (14.2)	.500 (12.7)

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



Right Angle Cable Plug*
DC-12.4 GHz



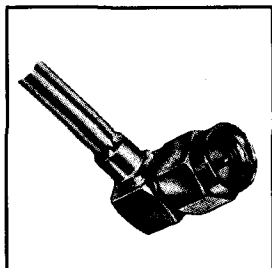
Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2007-7941-02	2007-7985-02
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)

Finish: Housing is gold plated in all cases. Coupling nut is passivated stainless steel. For gold plated coupling nut, change the part number suffix from -02 to -00.
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.

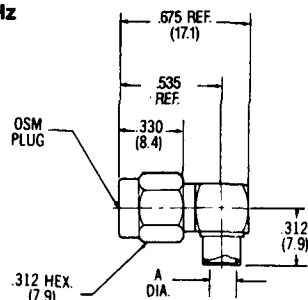
OSM (SMA)

For Semi-Rigid Cable

.085 and .141 Dia. • Direct Solder Attachment



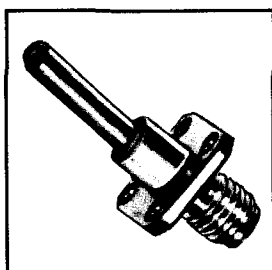
Right Angle Cable Plug*
DC-18.0 GHz



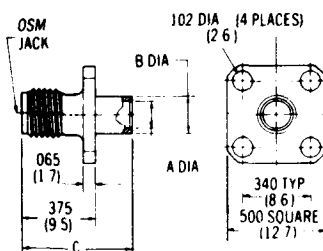
Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2007-5054-02	2007-5055-02
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)

Finish: Housing is gold plated in all cases. Coupling nut is passivated stainless steel. For gold plated coupling nut, change the part number suffix from -02 to -00.

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.



Flange Mount Cable Jack



Cable	RG 402/U (.141)	RG 405/U (.085)
Cable Dielectric	Solid PTFE	Solid PTFE
Part Number	2006-7941-00	2006-5012-00
Dim. A	Inches (mm) .144 Min. (3.7)	Inches (mm) .089 Min. (2.3)
Dim. B	.180 (4.6)	.120 (3.0)
Dim. C	.560 (14.2)	.500 (12.7)

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