

ConheX® Subminiature RF Connectors

ConheX® connectors are subminiature units built to meet or exceed the requirements of MIL-C-39012, Types SMB and SMC... used extensively in military, telecommunications and instrumentation for high-density radio frequency and microwave circuits up to 12.4 GHz. Because of their small size, these connectors utilize overlapping dielectrics to maintain electrical integrity at high frequencies. Screw-on MIL type SMC, snap-on MIL type SMB and slide-on interfaces in both 50 and 75 Ohm impedances. Crimp and clamp type connections for braided coax cable. Clamp, solder and solder-clamp attachments for semi-rigid coax. Over 300 different connector types available.



Standard Data

ELECTRICAL

Impedance: 50 ohms and 75 ohms, nominal
Frequency Range: 0 to 12.4 GHz
Insulation Resistance: 1000 megohms min.
Voltage Standing Wave Ratio (VSWR)*
To 12.4 GHz or 80% of upper cutoff frequency of the cable, whichever is lower.

Cable	(F=GHz)	Mating Engagement			
		Snap-On (SMB)		Screw-On (SMC)	
		Straight	Rt. Angle	Straight	Rt. Angle
RG-196/U Series		1.30 + .04F	1.45 + .06F	1.25 + .04F	1.40 + .06F
RG-188/U Series		1.25 + .04F	1.35 + .04F	1.20 + .04F	1.30 + .04F

Dielectric Withstanding Voltage (DWV): VRMS at Sea Level 1500
50 Ω connectors for RG-188/U series cable
R.F. Leakage:
Screw-On -60 dB min. @ 2-3 GHz
Snap-On and Slide-On -55 dB min. @ 2-3 GHz
Insertion Loss: .25 dB max. freq. GHz tested @ 4 GHz

MATERIALS AND FINISHES

Body and Body Components and Male Contacts: Brass, half hard, per QQ-B-626, Alloy 360.
Female Contacts: Beryllium copper per QQ-C-530, heat treated per MIL-H-7199.
Insulators: TFE fluorocarbon per ASTM D 1710, Type I Grade 1.
Lockwashers: Phosphor bronze per QQ-B-750.
Clamp Sleeve: Nickel silver.
Crimp Ferrule: Annealed copper alloy per WW-T-799.
Gaskets: Silicone rubber per ZZ-R-765, Class IIB, Grade 65-75.
Center Contacts (except for QPL items):
.000050 min. Gold per MIL-G-45204B Type I, Grade C, Class 1.
over .000005 Gold per MIL-G-45204B Type I, Grade A.
over .0001 min. nickel Per QQ-N-290.
Other Metal Parts: Gold plated to meet the finish and corrosion requirements of MIL-C-39012.
*Applicable to 50 ohm cables only.

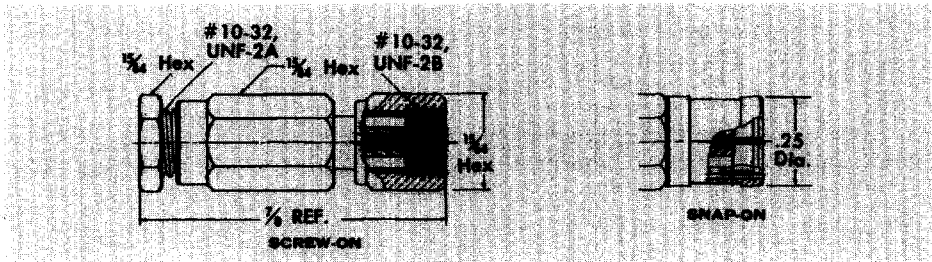
ENVIRONMENTAL

Temperature Rating: -65°C to +165°C

GENERAL

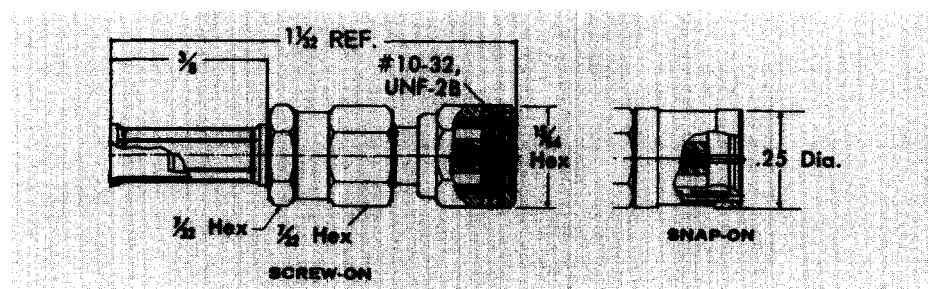
Hermetic Seal: Leakage of hermetically sealed connectors shall not exceed 1 x 10⁻⁵ cc/sec. of tracer gas at atmospheric pressure.
Contact Captivation: Unless otherwise specified, all connectors feature captivated contacts. When captivated, the contacts will withstand 4.0 lbs. minimum axial force.
Contact Torque: N/A
Connector Durability: 500 cycles minimum.
Cable Retention:
When properly assembled to the compatible braided coaxial cable, the retention is equal to the breaking strength of the cable.

Straight Plug for Braided Coax, Clamp Type



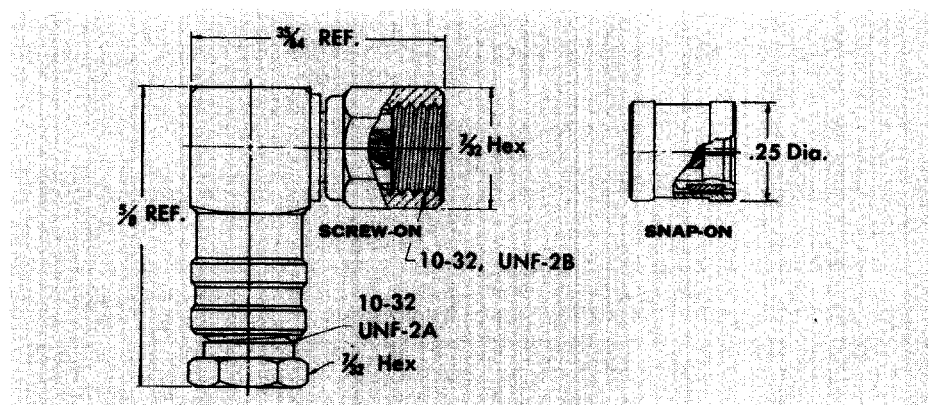
Cable	Part Number	
	Screw-On	Snap-On
RG-188/U; 316/U	50-007-0000	51-007-0000
RG-178/U; 196/U	50-007-3196	51-007-3196

Straight Plug for Braided Coax, Crimp Type



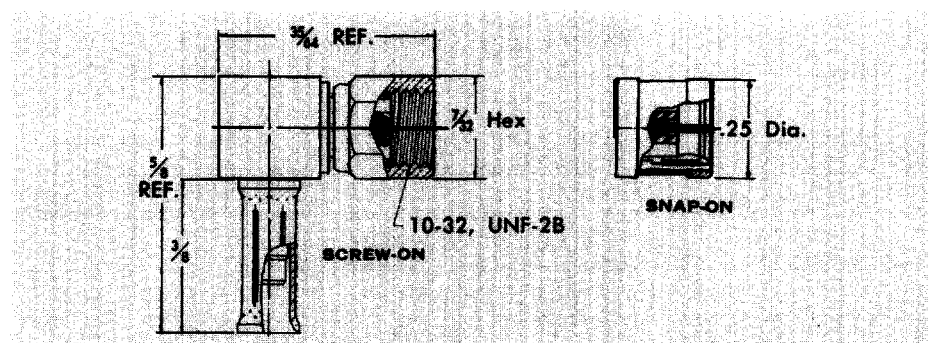
Part Number		
Cable	Screw-on	Snap-on
RG-188/U; 316/U	50-024-0000	51-024-0000
RG-178/U; 196/U	50-024-3196	51-024-3196

Right Angle Plug for Braided Coax, Clamp Type



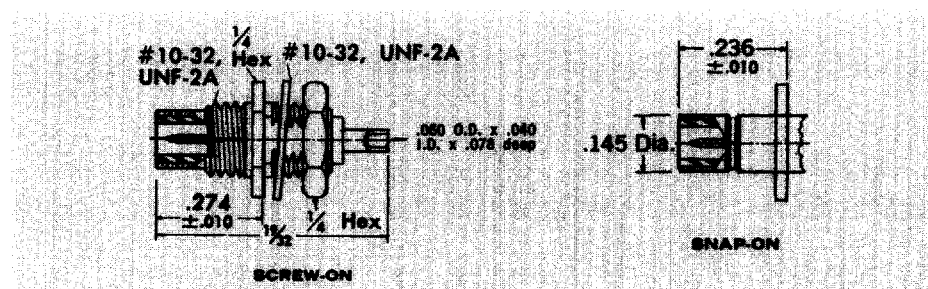
Part Number		
Cable	Screw-on	Snap-on
RG-188/U; 316/U	50-311-3188	51-311-3188
RG-178/U; 196/U	50-311-3196	51-311-3196

Right Angle Plug for Braided Coax, Crimp Type



Part Number		
Cable	Screw-on	Snap-on
RG-188/U; 316/U	50-328-3188	51-328-3188
RG-178/U; 196/U	50-328-3196	51-328-3196

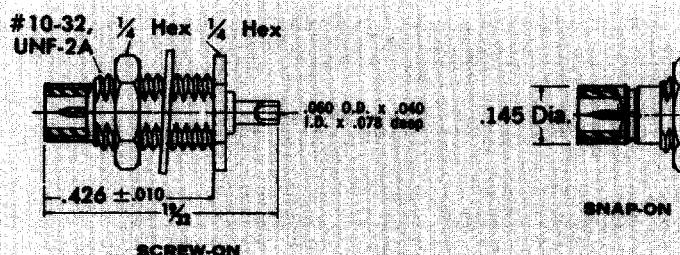
*Bulkhead Jack Receptacle, Front Mount, Solder Pot



Part Number	
Screw-on	Snap-on
50-045-0000	51-045-0000

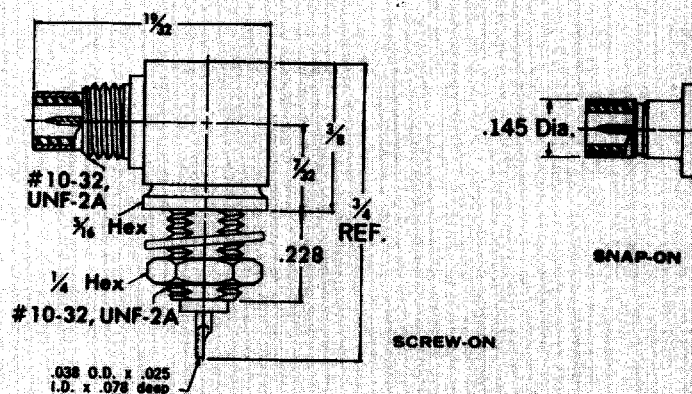
*Designed for .093" max. Panel

*Bulkhead Jack Receptacle, Rear Mount, Solder Pot



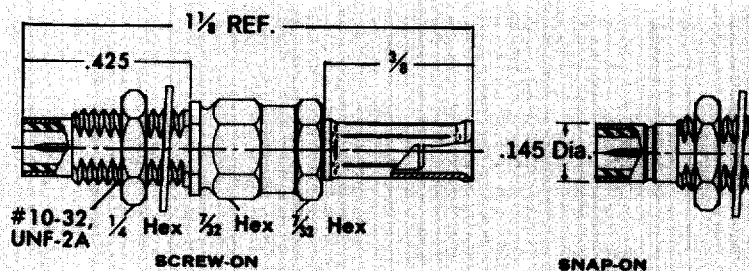
Part Numbers	
Screw-on	Snap-on
50-043-0000	51-043-0000

*Right Angle Bulkhead Jack Receptacle, Solder Pot



Part Numbers	
Screw-on	Snap-on
50-047-0000	51-047-0000

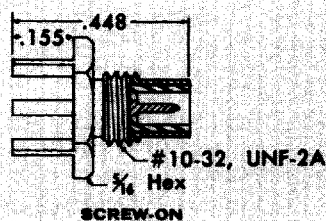
*Straight Bulkhead Jack for Braided Coax, Crimp Type



Cable	Part Numbers	
	Screw-on	Snap-on
RG-188/U; 316/U	50-027-0000	51-027-0000
RG-178/U; 196/U	50-027-3196	51-027-3196

*Printed Circuit Jack Receptacle

Straight

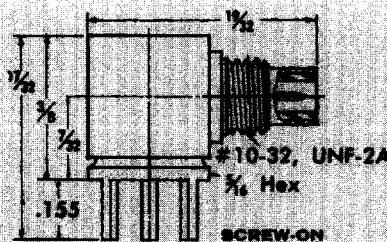


Part Number: 50-051-0000

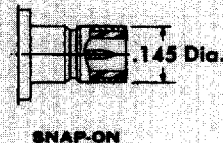


Part Number: 51-051-0000

Right Angle



Part Number: 50-053-0000



Part Number: 51-053-0000

*Designed for .093" max. panel