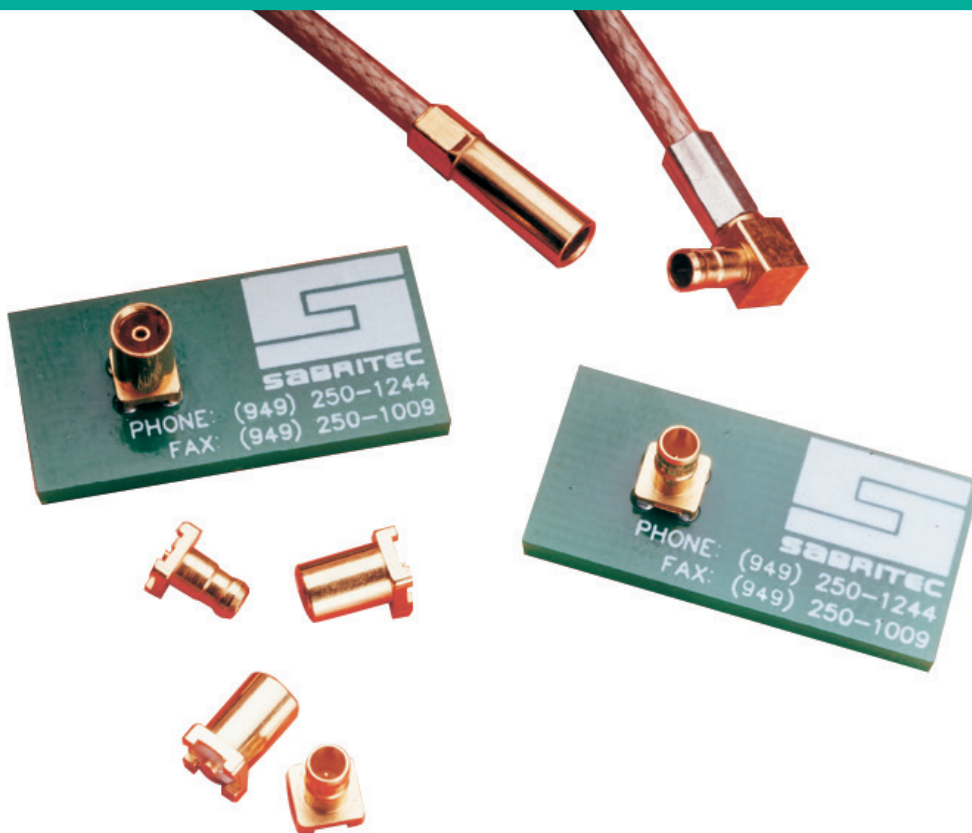
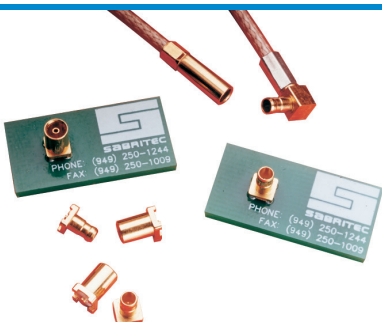


SCX Series Connectors



SCX Series



The SCX series offers the utmost savings in space utilization without compromising rugged mechanical performance and superior RF high frequency electrical performance. These connectors feature a .145" maximum overall diameter with a .375" overall length for the mated connector pair.

A revolutionary designed air dielectric interface is integrated into the SCX series resulting in exceptional RF performance with a 50 ohm characteristic impedance maintained throughout the mated connector pair. The result is an extremely small and rugged high frequency RF connector series with exceptionally low VSWR (1.25:1) from DC to 20 GHz. This connector series is ideal for low profile board to board stacking arrangements.

All configurations and styles are available including surface mount, end launch and compliant pin press-fit PCB mounting alternatives. The cable mount connectors are designed for a full crimp assembly with standard crimp tools or solder assembly termination.

The SCX series is applicable for high frequency RF applications from DC to 20 GHz. The durable connector is gold plated with heat treated beryllium copper spring fingers allowing for a minimum of 1,000 mating cycles without any noted degradation of RF performance. The spring fingers allow for a rugged and reliable snap-on, detent locking interconnect mechanism. The low profile mated pair overall length of .375" significantly increases the number of mounting possibilities.

Mechanical & Environmental Specifications

Temperature Rating	-65°C to + 165°C
Corrosion	MIL-STD-202 Method 101, Test Condition B
Shock	MIL-STD-202 Method 213, Test Condition B
Vibration	MIL-STD-202 Method 204, Test Condition B
Thermal Shock	MIL-STD-202 Method 107, Test Condition B
Durability	1000 Mate/Unmate cycles min.
Mating/Unmate Force	1 lb. min
Float Mount Constraints	0.10" full radial & 0.015" axial misalignment max.

Electrical Specifications

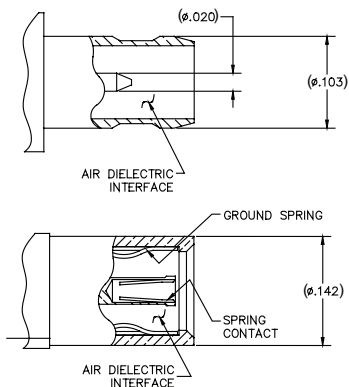
Dielectric Withstanding Voltage	500 VDC @ sea level with 70% relative humidity
Insulation Resistance	5000 MegaOhms min. @ 200 VDC
Contact Current Rating	2 Amps max.
Characteristic Impedance	50 Ohm constant airline impedance
RF HI Potential Withstanding Voltage	125 VRMS @ 5 MHz
Corona Level @ 70,000 ft.	Center contact to intermediate contact: 125 VAC
Permeability	2.0 max.
Frequency Range	DC to 20 GHz
VSWR	1.25:1 max. (mated pair)

Materials and Finishes

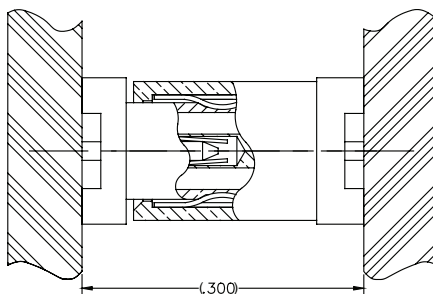
Shell	Brass per ASTM B16, alloy UNS C36000 Gold plate per MIL-DTL-45204, Type II, Class 1
Center Contacts	Brass per ASTM B16, alloy UNS 36000 or BeCu per ASTM-B196, alloy UNS C17200, C17300 Gold plate per MIL-DTL-45204, Type II, Class 1
Ground Spring	BeCu per ASTM-B194, alloy UNS C17200 Gold plate per MIL-DTL-45204, Type II, Class 1
Insulators	PTFE per ASTM D-1710

All specifications subject to change without notice.

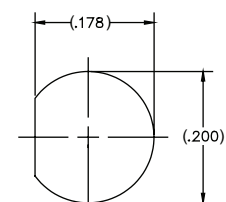
SCX Interface Dimensions



Mated Pair Length

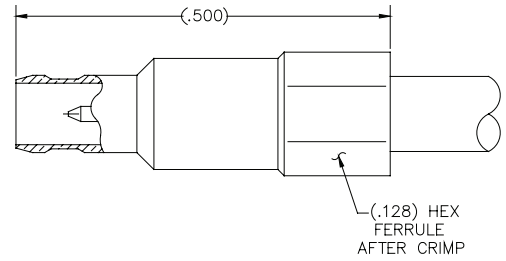


Mounting D-Hole Bulkhead Connectors



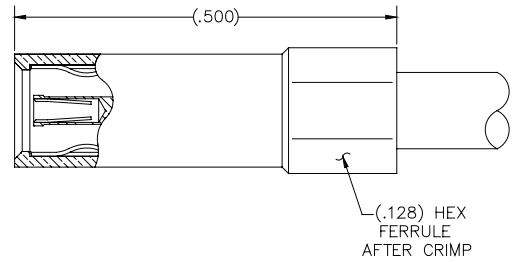
SCX Cable Plug

Part Number	Cable Type	Cable
013220-2000	Flexible Coax	RG-316
013220-2001	Flexible Coax	RG-178
013220-2002	Semi-Rigid Coax	RG-405



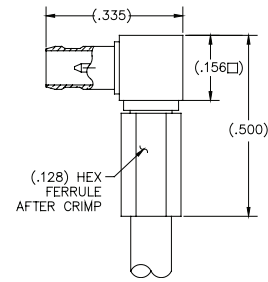
SCX Cable Receptacle

Part Number	Cable Type	Cable
013120-2000	Flexible Coax	RG-316
013120-2001	Flexible Coax	RG-178
013120-2002	Semi-Rigid Coax	RG-405



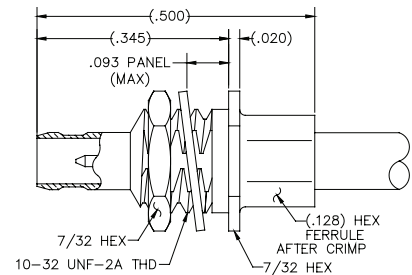
SCX Right Angle Plug

Part Number	Cable Type	Cable
013220-1008	Flexible Coax	RG-316
013220-1009	Flexible Coax	RG-178
013220-1010	Semi-Rigid Coax	RG-405



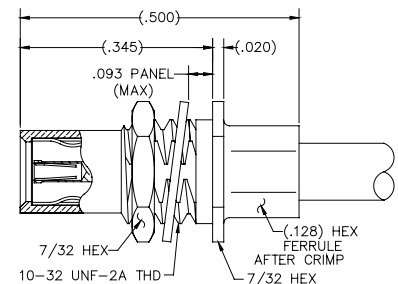
SCX Bulkhead Mount Cable Plug

Part Number	Cable Type	Cable
013220-5011	Flexible Coax	RG-316
013220-5012	Flexible Coax	RG-178
013220-5013	Semi-Rigid Coax	RG-405



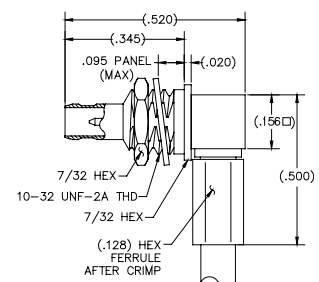
SCX Bulkhead Mount Cable Receptacle

Part Number	Cable Type	Cable
013120-5011	Flexible Coax	RG-316
013120-5012	Flexible Coax	RG-178
013120-5013	Semi-Rigid Coax	RG-405

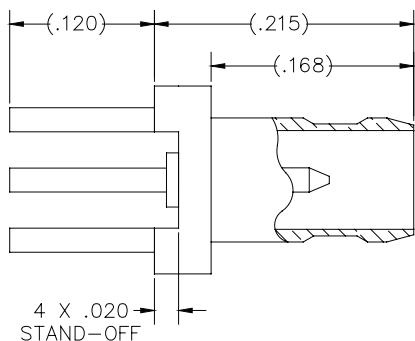


SCX Right Angle Bulkhead Mount Cable Plug

Part Number	Cable Type	Cable
013212-1011	Flexible Coax	RG-316
013212-1012	Flexible Coax	RG-178
013212-1013	Semi-Rigid Coax	RG-405



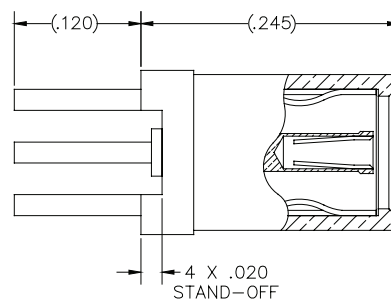
Straight PCB Plug



Part Number

013200-2024

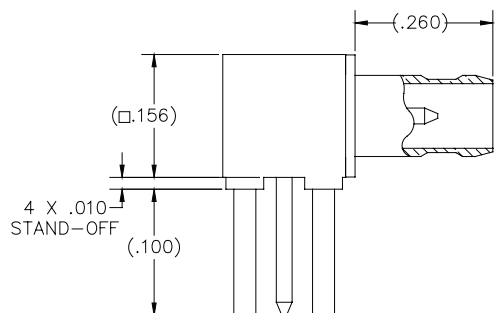
Straight PCB Receptacle



Part Number

013100-2024

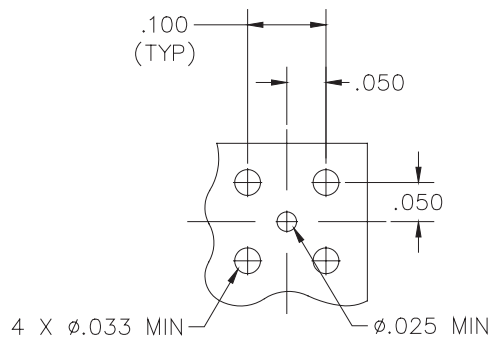
Right Angle PCB Plug



Part Number

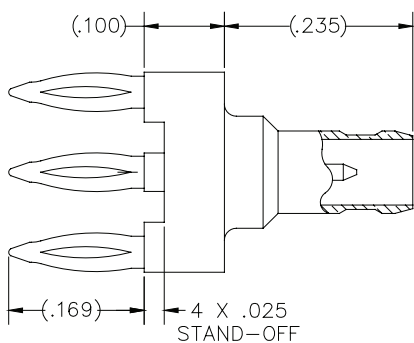
013200-1002

PCB Mounting Dimension



PCB Pattern for 0.100" Centers

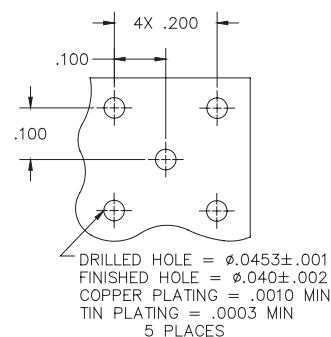
Compliant Pin PCB Plug



Part Number

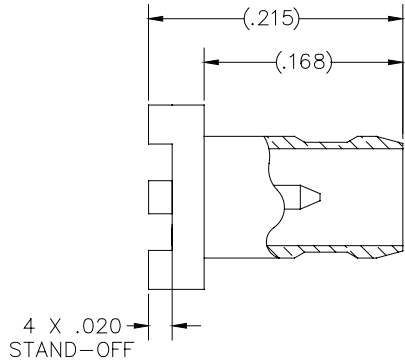
013200-2029

Compliant Pin PCB Mounting Dimension



PCB Pattern for 0.200" Centers

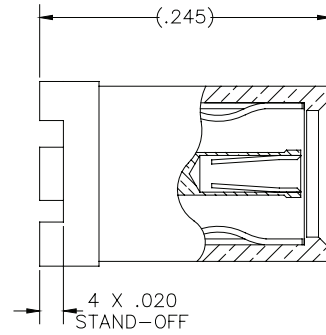
Surface Mount Plug



Part Number

013200-2023

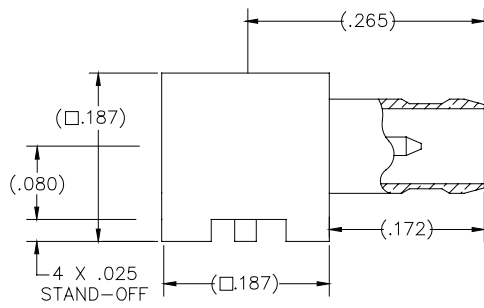
Surface Mount Receptacle



Part Number

013100-2023

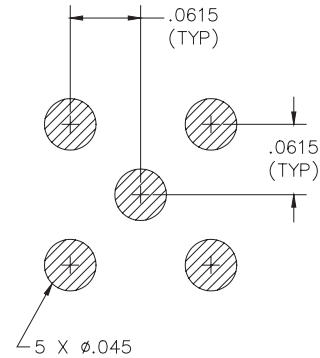
Right Angle Surface Mount Plug



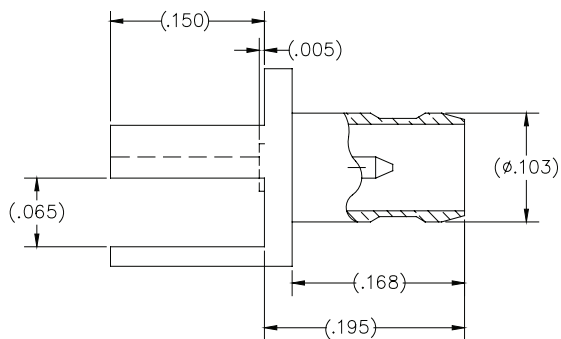
Part Number

013200-1003

Surface Mount PCB Layout



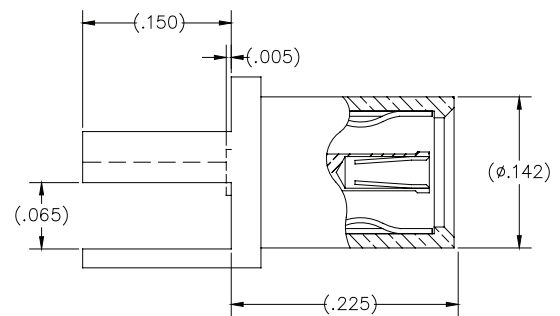
End Launch Surface Mount Plug



Part Number

013200-2030

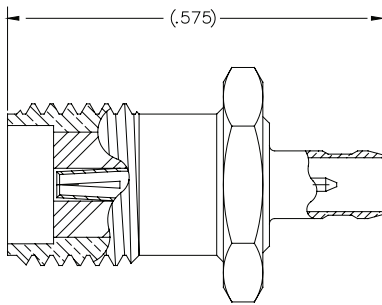
End Launch Surface Mount Receptacle



Part Number

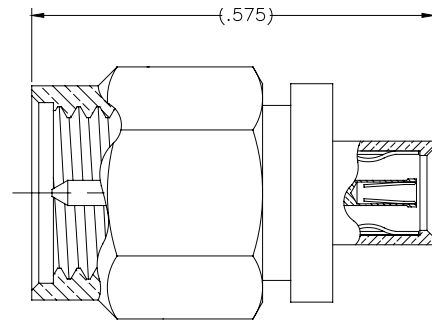
013100-2030

SCX Plug to SMA Jack Adapter



Part Number
013200-4010

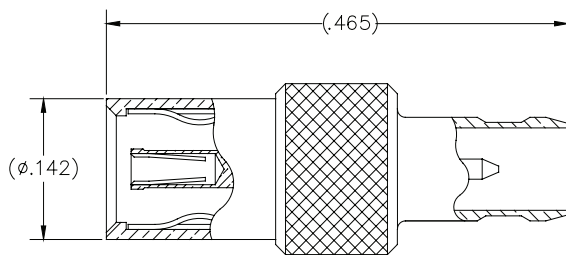
SCX Receptacle to SMA Plug Adapter



Part Number
013100-4010

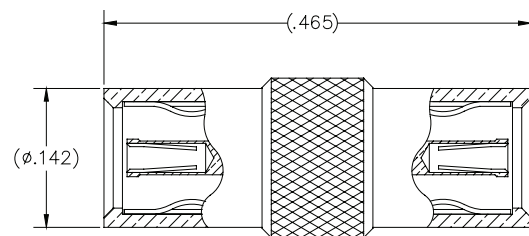
In-Series SCX Adapters

Plug to Receptacle Adapter



Part Number
013100-4011

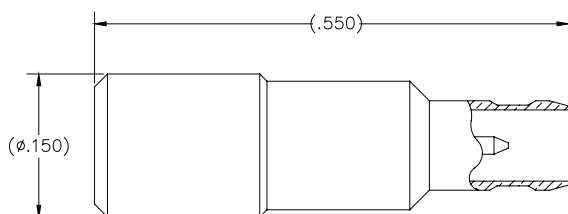
Receptacle to Receptacle Adapter



Part Number
013200-4011

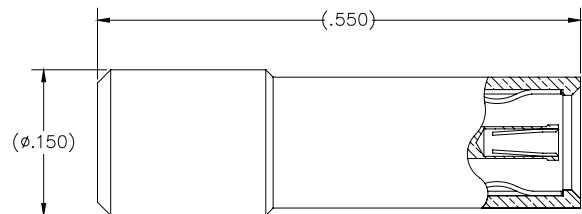
50 Ohm Load Terminators

50 Ohm Load Termination Plug



Part Number
013200-2028

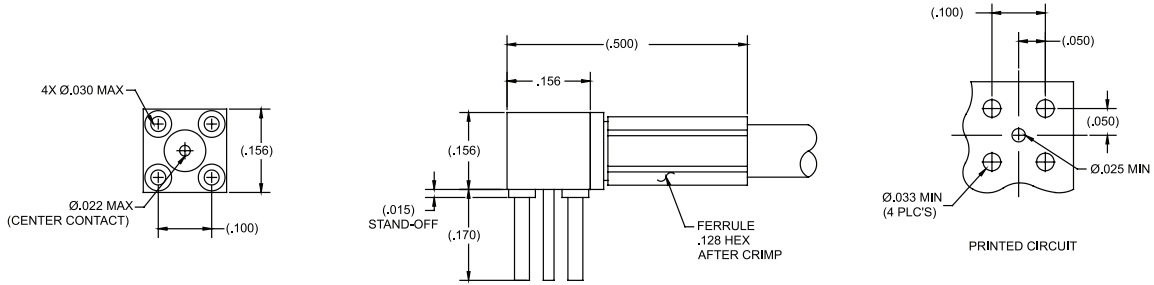
50 Ohm Load Termination Receptacle



Part Number
013100-2028

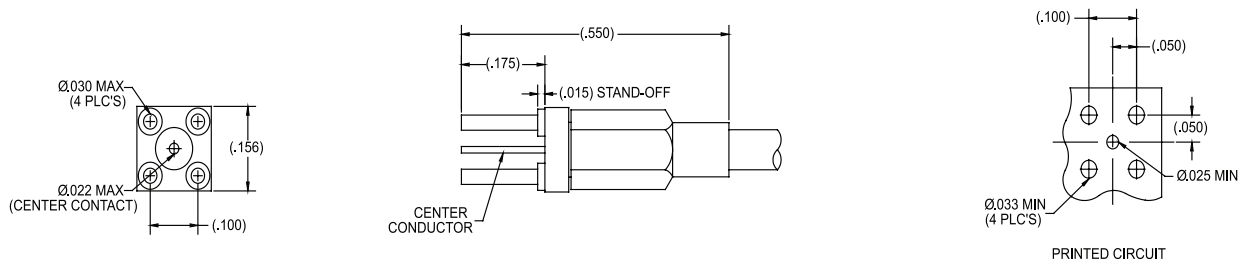
Right Angle PCB Mount to Cable

Part Number	Cable Type	Cable
010012-1011	Flexible Coax	RG-178
010012-1012	Flexible Coax	RG-316



Straight PCB Mount to Cable

Part Number	Cable Type	Cable
010012-2010	Flexible Coax	RG-178
010012-2011	Flexible Coax	RG-316



How To Order



1 Connector #1

2 Cable Group #	Semi-Rigid Coax	Flexible Coax
	2 7 = SR.047	3 1 = RG-178
	2 8 = SR.086	3 2 = RG-316
	2 9 = .141 Flex	3 6 = RG-58
3 Connector #2	OL for Open Lead	

4 Cable Length in Inches (XXX)



Semi-Rigid Coax Cables				
Cable Group	Cable Designation	Impedance (Ohms)	Jacket	Inner Conductor
27	SR.047	50	0.047"	0.0362"
28	SR.086	50	0.0865"	0.0201"



Flexible Coax Cables				
Cable Group	Cable Designation	Impedance (Ohms)	Jacket	Inner Conductor
29	.141 Flex	50	0.160"	0.036"
30	.086 Flex	50	0.104"	0.020"
31	RG-178	50	0.071"	0.012"
32	RG-316	50	0.098"	0.0201"
33	RG-58	50	0.195"	0.0355"

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