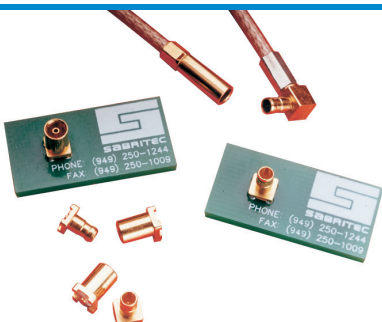


# SCX Series



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

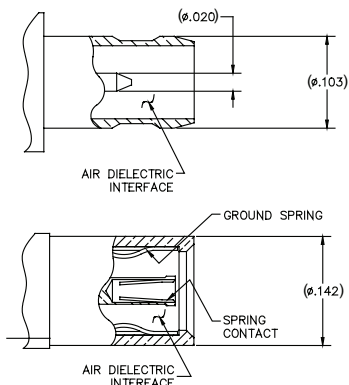
Dielectric Withstanding Voltage	500 VDC @ sea level with 70% relative humidity
Insulation Resistance	5000 MegaOhms min. @ 200 VDC
Contact Current Rating	2 Amps max.
Characteristic Impedance	50 Ohm constant airline impedance
RF HI Potential Withstanding Voltage	125 VRMS @ 5 MHz
Corona Level @ 70,000 ft.	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

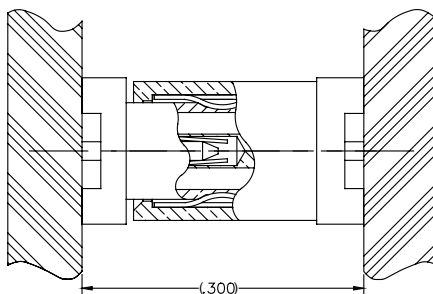
Shell	Brass per ASTM B16, alloy UNS C36000 Gold plate per MIL-DTL-45204, Type II, Class 1
Center Contacts	Brass per ASTM B16, alloy UNS 36000 or BeCu per ASTM-B196, alloy UNS C17200, C17300 Gold plate per MIL-DTL-45204, Type II, Class 1
Ground Spring	BeCu per ASTM-B194, alloy UNS C17200 Gold plate per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

