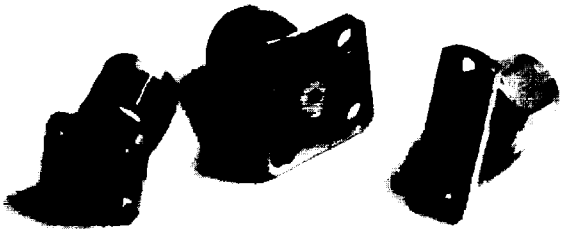
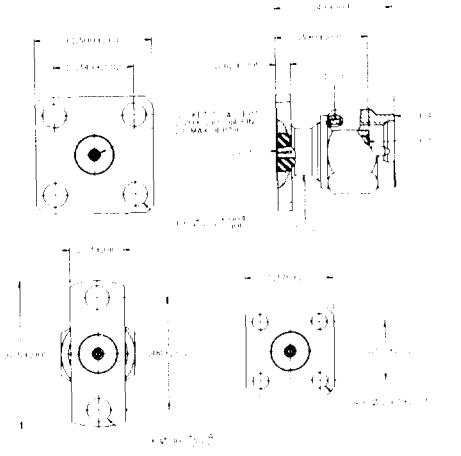
Field Replaceable SMA Plug

142-1801-531 142-1801-536
142-1801-581 142-1801-586
142-1801-631 142-1801-636





- Mechanically Captivated
- Low RF Leakage
- Mates with .020" Diameter Pin

Part Number	Flange Style	Item 1 Body	Item 2 Contact	Item 3 Insulator	Item 4 Coupling Nut	Item 5 Retention Spring
142-1801-531	4 Hole X .500	Brass Gold pl .00001 min. over Nickel pl .00005 min. over Copper pl .00005 min.	Beryllium Copper Gold pl .00005 min. over Nickel pl .00005 min. over Copper pl .00005 min.	Teflon	Brass Gold pl .00001 min. over Nickel pl .00005 min. over Copper pl .00005 min.	Beryllium Copper Unplated
142-1801-536	4 Hole X .500	Brass Nickel pl .00010 min. over Copper pl .00005 min.	Beryllium Copper Gold pl .00005 min. over Nickel pl .00005 min. over Copper pl .00005 min.	Teflon	Brass Nickel pl .00010 min. over Copper pl .00005 min.	Beryllium Copper Unplated
142-1801-581	4 Hole X .375	Gold plated Brass	Gold plated Beryllium Copper	Teflon	Gold plated Brass	Beryllium Copper
142-1801-586	4 Hole X .375	Nickel plated Brass	Gold plated Beryllium Copper	Teflon	Nickel plated Brass	Beryllium Copper
142-1801-631	2 Hole X .223	Gold plated Brass	Gold plated Beryllium Copper	Teflon	Gold plated Brass	Beryllium Copper
142-1801-636	2 Hole X .223	Nickel plated Brass	Gold plated Beryllium Copper	Teflon	Nickel plated Brass	Beryllium Copper

Electrical:
Impedance: 50 Ohms
Frequency Range: 0-26.5 GHz
VSWR: Dependent upon application, typically <1.1 + .01F (F in GHz) - see plot
Working Voltage: 335 Vrms max at sea level
Dielectric Withstanding Voltage: 1000 Vrms min at sea level
Insulated Resistance: 5000 Megohm min
Contact Resistance:
Center Contact - Initial 6.0 milliohm max, after environmental 8.0 milliohm max
Outer Conductor - Initial 2.0 milliohm max
Corona level: 250 volts min at 70,000 feet
Insertion loss: Dependent upon application, typically < .03 $\sqrt{F}$ DB (F in GHz)
RF Leakage: -70 DB min at 2.5 GHz
RF High Potential Withstanding Voltage: 670 VRMS min at 4 and 7 MHz

Mechanical:
Engage/Disengage Torque: 2 inch-pounds max
Mating Torque: 7-10 inch-pounds
Coupling Proof Torque: 15 inch-pounds min
Coupling Nut Retention: 60 lbs min
Contact Retention: 6 lbs min axial force
Durability: 500 cycles min

Environmental:
(Meets or exceeds the applicable paragraph of MIL-C-39012)
Thermal Shock: MIL-STD-202, Method 107, Condition B
Operating Temperature: -65° C to 165° C
Corrosion: MIL-STD-202, Method 101, Condition B
Shock: MIL-STD-202, Method 213, Condition I
Vibration: MIL-STD-202, Method 204, Condition D
Moisture Resistance: MIL-STD-202, Method 106

TYPICAL RETURN LOSS
(142-1801-531,536,581,586,631,636)