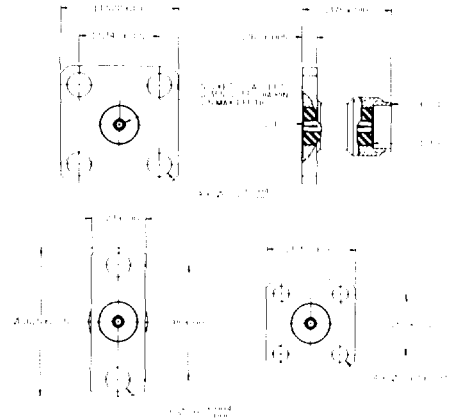
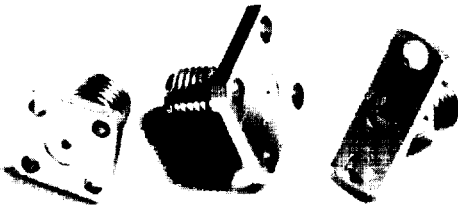


Field Replaceable SMA Jack

142-1701-541
142-1701-591
142-1701-641

142-1701-546
142-1701-596
142-1701-646



- Mechanically Captivated
- Low RF Leakage
- Mates with .036" Diameter Pin

| Part Number | Flange Style | Item 1 Body | Item 2 Contact | Item 3 Insulator |
|--------------|---------------|---|--|------------------|
| 142-1701-541 | 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 |
| 142-1701-546 | 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 |
| 142-1701-591 | 4 Hole X .375 | Gold plated Brass | Gold plated Beryllium Copper | Teflon |
| 142-1701-596 | 4 Hole X .375 | Nickel plated Brass | Gold plated Beryllium Copper | Teflon |
| 142-1701-641 | 2 Hole X .223 | Gold plated Brass | Gold plated Beryllium Copper | Teflon |
| 142-1701-646 | 2 Hole X .223 | Nickel plated Brass | Gold plated Beryllium Copper | Teflon |

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

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
(142-1701-541,546,591,596,641,646)

