

Intelliconnect, Ltd.

A New Type of Connector Company

SERIES SMA (WATERPROOF/MILITARY)

GENERAL DESCRIPTION

This miniature connector series is designed to be compatible with the small semi-rigid cables that have very low VSWR at high frequencies. In addition, other connectors in the series can accommodate flexible coaxial cable, PCB, flange, surface, edge and bulkhead configurations. This series has a 1/4-36 screw thread coupling mechanism.

MATERIALS

Bodies & Other Parts: Stainless Steel per ASTM A582 or equivalent.
 Female Contacts: Beryllium Copper per ASTB B196 or equivalent.
 Male Contacts: Brass per ASTM B16 or equivalent.
 Insulators (Dielectric): PTFE Fluorocarbon per ASTM D1710 or equivalent.
 Gaskets: Silicone rubber per ZZ-R-765, Class II, Grade 50.

ELECTRICAL

Impedance: 50 Ohms Nominal
 Frequency Range: DC-18 GHz
 Insulation Resistance: 5,000 Megohms min.
 Voltage Rating: 335 VRMS
 Dielectric Withstanding: 1,500 VRMS at sea level
 Voltage Standing Wave Ratio (VSWR): 1.05 + .05 (f) GHz max.
 Contact Resistance:
 Outer Contact: 3.0 Milliohms
 Center Contact: 2.0 Milliohms

ENVIRONMENTAL

Waterproofing: Meets IP67 per IEC 60529, tested to a 10 meter water depth in an unmated condition for a duration of 4 hours.
 Temperature rating: -65°C to +165°C
 Vibration: MIL-STD-202, Method 204
 Shock: MIL-STD-202, Method 213
 Thermal Shock: MIL-STD-202, Method 107
 Corrosion (Salt Spray): MIL-STD-202, Method 101
 Moisture Resistance: MIL-STD-202, Method 106

PLATING OPTIONS

Gold: Per MIL-G-45204, Type II, Grade C
 Nickel: Per QQ-N-290, Class II
 Silver: Per QQ-S-365, Type II, Grade A
 Passivate: Per QQ-P-35, Type II

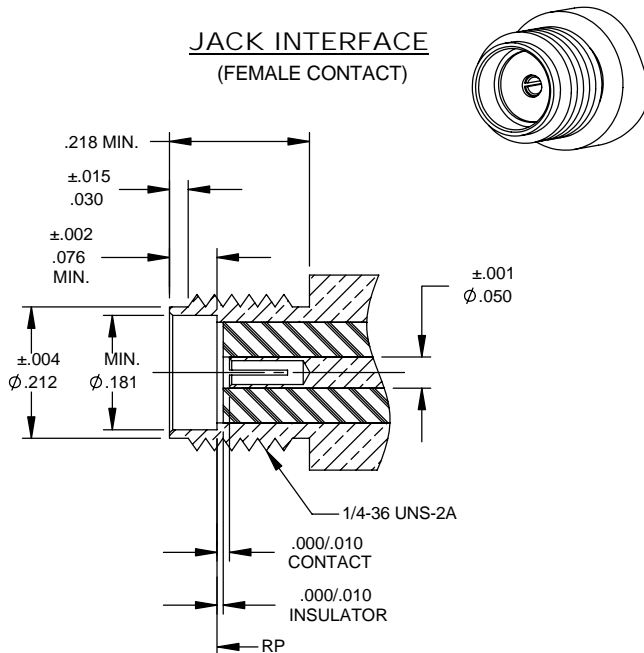
MECHANICAL

Force to Engage and Disengage: Torque, 2 in.-lbs. max.
 Coupling Sleeve Retention Force: 60 lbs. min.
 Coupling Proof Torque: 7 to 10 in.-lbs.
 Mating Cycles: 500 min.

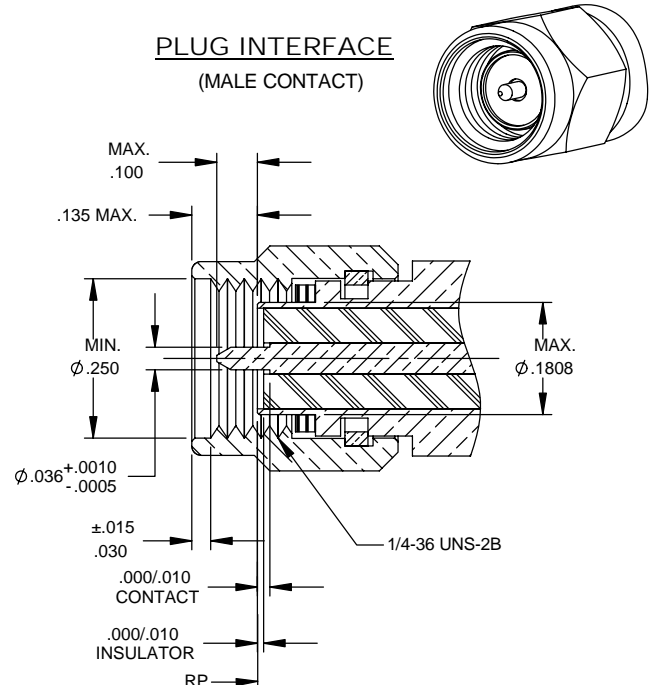
DESIGN IN ACCORDANCE WITH

US MIL-PRF-39012, MIL-STD-348
 CECC: 22 110
 IEC: 169-15
 BS9210N0006
 INTELLICONNECT: ES101, ES103

JACK INTERFACE
(FEMALE CONTACT)



PLUG INTERFACE
(MALE CONTACT)



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