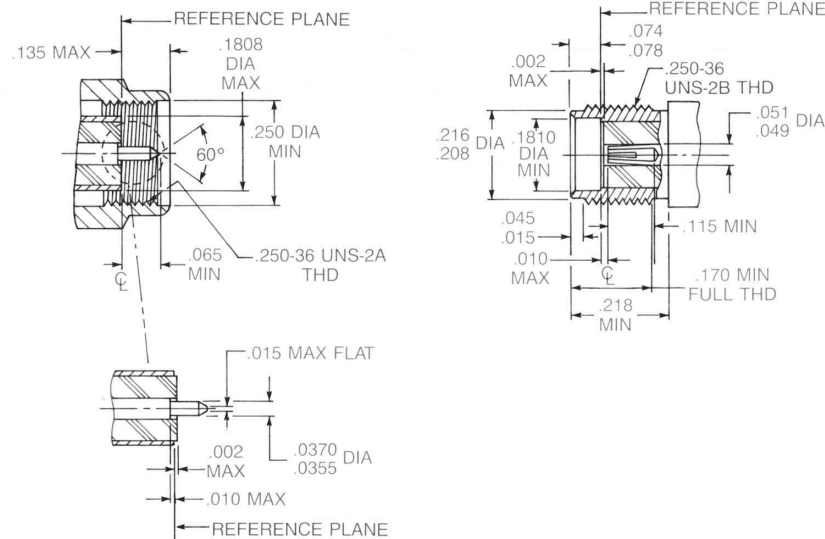


INTERFACE DIMENSIONS

PER MIL-STD-348



SPECIFICATIONS

MIL-PRF-39012

MATERIALS:

Body parts: Stainless steel per ASTM-A-582, type 303

Contacts: Beryllium copper per ASTM B196, condition HT

Insulators: Teflon TFE per ASTM-D-1710

Gaskets: Silicone rubber per ZZ-R-765, class 2B, grade 65-75

FINISH:

Center contacts: Gold-plate per MIL-G-45204

All other parts are finished to meet MIL-PRF-39012 corrosion requirements.

ELECTRICAL:

Insulation resistance:

Greater than 5,000 MΩ

Dielectric withstanding voltage:

Per MIL-STD-202, method 301

RF highpot voltage:

335-675 VAC at 5-7.5 MHz, dependent on cable type

Contact resistance: 3 mΩ max

RF leakage: -60 dB min, 2-3 GHz

Insertion loss: $0.03 \times \sqrt{f}$ (GHz) max test frequency 6 GHz

VSWR (straight cable plugs and jacks):

RG178: $1.20 + [0.025 \times f \text{ (GHz)}]$, DC-12.4 GHz

RG316: $1.15 + [0.020 \times f \text{ (GHz)}]$, DC-12.4 GHz

RG142: $1.15 + [0.010 \times f \text{ (GHz)}]$, DC-12.4 GHz

RG402 (non-captive contact): $1.05 + [0.008 \times f \text{ (GHz)}]$, DC-18 GHz

RG402 (captive contact): $1.05 + [0.001 \times f \text{ (GHz)}]$, DC-18 GHz

RG405 (captive contact): $1.07 + [0.010 \times f \text{ (GHz)}]$, DC-18 GHz

RG405 (non-captive contact): $1.07 + [0.008 \times f \text{ (GHz)}]$, DC-18 GHz

VSWR SPECIFICATIONS ARE NOT APPLICABLE TO NON-CABLED CONNECTORS.

Impedance: 50 Ω

Frequency range: DC to 8, 12.4 or 18 GHz, dependent on cable type and configuration

MECHANICAL:

Engage/disengage force: 2 lb max

Mating characteristics: Dimensions per above

For female contacts (after 5 insertions of 0.0375 Ø pin, 0.040 min depth):

Insertion force with 0.037 min Ø pin, 2 lb max

Withdrawal force for 0.0355 max Ø pin, 1 oz min

Contact retention (captive contact connectors):

6 lb min axial force

Durability: 500 mating cycles

ENVIRONMENTAL: (per MIL-STD-202)

Vibration: Method 204, test condition D

Mechanical shock: Method 213, condition I

Thermal shock: Method 107, condition B

Corrosion: Method 101, condition B, 5% salt solution

Moisture resistance: Method 106

Corona level: Corona free at 70,000 ft

Voltage dependent on cable size

Temperature rating: -65°C to + 165°C