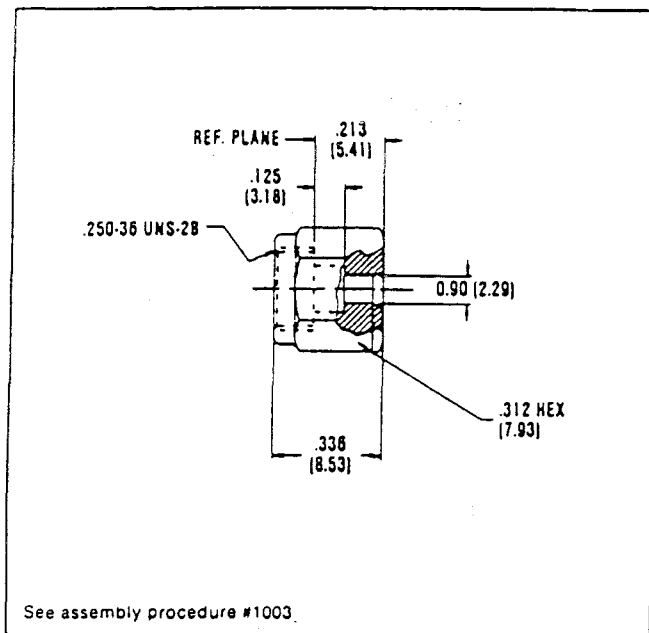


S M A

STRAIGHT SMA CABLE PLUG

Figure 4 (UT#85) 11 SMA-50-2-301



MICROSTOCK, INC.

P.O. BOX 91

WEST POINT, PA 19486-0091

(215) 699-0355 FAX: (215) 699-0286

SPECIFICATIONS

materials

Body parts: Stainless steel per QQ-S-764, Type 303, Condition A
Center contacts: Beryllium copper per QQ-C-530, Condition HT.
Dielectrics: Solid PTFE per ASTM D-1457.
Gaskets: Silicone rubber per ZZ-R-765, Class 2B, Grade 70

finish

Bodies and center contacts: Gold plate per MIL-G-45204, Type II, Class 1, over nickle plate per QQ-N-290, Class 2.

electricals

Insulation resistance: 5000 megohms minimum.
Dielectric withstanding voltage: 1000 VAC RMS @ sea level UT*85; 1500 VAC RMS @ sea level UT*141A.
RF high potential withstanding voltage: 670 volts RMS @ 5 MHz UT*85; 1000 volts RMS @ 5 MHz UT*141A.
Contact resistance: center contact 3.0 milliohms maximum, outer contact 2.0 milliohms maximum.
Nominal impedance: 50 ohms.
Frequency Range: 0-26.5 GHz.
SWR: UT*85 - Male - $1.05 + .006f$ (GHz).
Female - $1.05 + .006f$ (GHz).
UT*141 - Male with pin - $1.05 + .006f$ (GHz).
Male pinless - $1.035 + .005f$ (GHz).
Female - $1.05 + .006f$ (GHz).
Insertion loss: $0.03 \sqrt{f}$ (GHz) maximum.
RF leakage: -90dB minimum from 2 to 3 GHz

mechanical*

Force to engage and disengage: Torque 2 inch - pounds maximum; longitudinal force - N/A
Coupling nut retention force: Female connectors - N. A
Male connectors - 100 lbs. minimum.
Cable retention force: UT*85 - 30 lbs. minimum.
UT*141A - 60 lbs. minimum.
Recommended mating torque: 7-10 inch - pounds
Mating characteristics: per MIL-STD-348. (Fig. 1, 2, and 3).
Connector durability: 500 mating/unmating cycles minimum.

environmental

Vibration: (per MIL-STD-202) method 204 test condition D.
Shock: (per MIL-STD-202) method 213, test condition I.
Corrosion (salt spray): (per MIL-STD-202) method 101, test condition B @ 5% salt solution for 48 hours.
Moisture resistance: (per MIL-STD-202) method 106, Step 7b (vibration) omitted.
Corona level: altitude 70,000 ft.
UT*85 - 250 VRMS minimum.
UT*141A - 375 VRMS minimum.
Operating temperature: -54°C to 125°C.

* Specifications to apply when connector is mated in accordance with the specifications of MIL-STD-348.

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