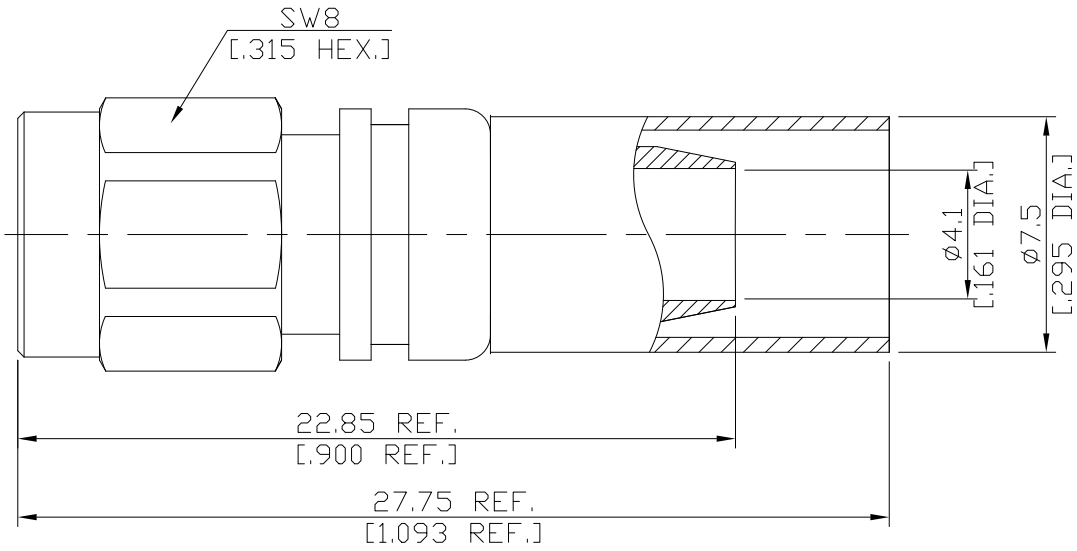
ROSNOL®
RF/Microwave Interconnect

# Technical Data Sheet

## SMA Plug (Male) Straight Connector, Cable Entry: Crimp, Contact Pin: Solder / Crimp Attachment for LMR240 DC-10GHz VSWR1.30

# SMA1C50-R240A / 1XX




All dimensions are in mm [inch]
Tolerances according to DIN ISO 2768-mH

## Interface

| | |
|---|---|
| According to | IEC 60169-15; CECC 22110; MIL-PRF-39012; MIL-STD-348B/310; EN 122110 |

## Electrical Data

| | |
|---|---|
| Impedance | 50 Ω |
| Frequency | DC to 10 GHz |
| VSWR (Return Loss) | ≤ 1.30 (≥ 17.69 dB) |
| Insertion Loss | ≤ 0.05 x √F (GHz) dB |
| Insulation Resistance | ≥ 5 GΩ |
| Center Contact Resistance | ≤ 3 mΩ |
| Outer Contact Resistance | ≤ 2 mΩ |
| Test Voltage | 1000 V rms |
| Working Voltage | 480 V rms |
| Power handling (at 20 °C, sea level) | ≤ 200 W @ 2 GHz |

*-VSWR in application depends decisive on cable assembly process-*

## Material And Plating

| Piece Parts | Material | Plating |
|---|---|---|
| Centre contact | Brass | Gold plating<br>(Non-magnetic nickel-phosphorus underplating) |
| Body | Stainless Steel | Passivated |
| Insulator | PTFE | |
| Gasket | Silicone Rubber | |
| Coupling nut | Stainless Steel | Passivated |
| Ferrule | Brass | Copper-Tin-Zinc Alloy |





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## Mechanical Data

| | |
|---|---|
| Coupling Mechanisms | Screw-Lock |
| Mating Cycles | ≥ 500 |
| Coupling Nut Retention | ≥ 270 N |
| Center contact captivation: axial | ≥ 27 N |
| Coupling Test Torque | ≤ 1.7 Nm |
| Recommended Torque | 0.8 Nm to 1.1 Nm |
| Centre Contact | Soldered or Crimped |
| Cable Entry | Crimped |

## Environmental Data

| | |
|---|---|
| Temperature Range | -65°C to +165°C |
| Thermal Shock | MIL-STD-202, Method 107, Condition B |
| Corrosion | MIL-STD-202, Method 101, Condition B |
| Vibration | MIL-STD-202, Method 204, Condition D |
| Shock | MIL-STD-202, Method 213, Condition I |
| Moisture Resistance | MIL-STD-202, Method 106 |
| RoHS | compliant |

## Suitable Cables

LMR240, RNL240

## Packing

Single or 100





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