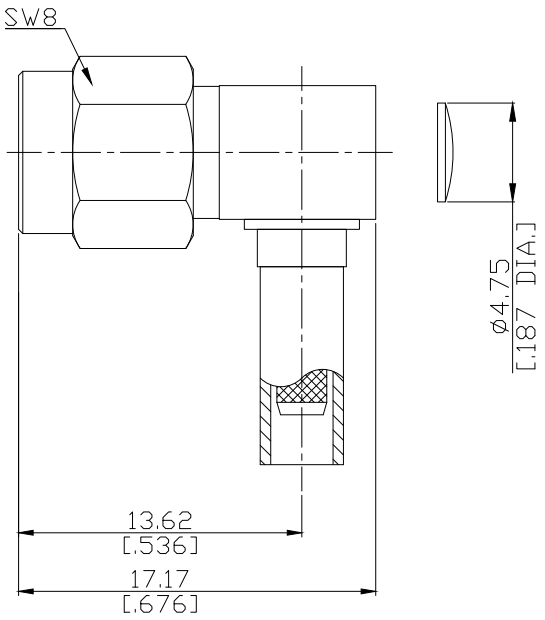
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

# SMA Rightangle Cable Plug Attach For RG316 DC-6GHz VSWR1.30

# SMA1C59-G316D / 111




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

## Interface

| | |
|---|---|
| According to | IEC 60169-15, MIL-STD-348A/310 |

## Electrical Data

| | |
|---|---|
| Impedance | 50 Ω |
| Frequency | DC to 6 GHz |
| VSWR (Return Loss) | ≤ 1.30 (≥ 17.7 dB) |
| Insertion Loss | ≤ 0.04 x √F (GHz) dB |
| Insulation Resistance | ≥ 5 GΩ |
| Center contact resistance | ≤ 3 mΩ |
| Outer contact resistance | ≤ 2 mΩ |
| Test Voltage (at sea level) | 1000 V rms |
| Working Voltage (at sea level) | 480 V rms |
| Power handling | ≤ 200 W @ 2 GHz |
| RF Leakage | ≥ 100 dB up to 1 GHz |

## Material And Plating

| Piece Parts | Material | Plating |
|---|---|---|
| Centre Contact | Brass | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Body | Brass | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Insulator | PTFE | |
| Gasket | Silicone Rubber | |
| Coupling Nut | Brass | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Crimp ferrules | Brass | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |

The facts and figures herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only. In the effort to improve our products, we reserve the right to make changes judged to be necessary.



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## Mechanical Data

| | |
|---|---|
| Coupling mechanisms | Screw-lock |
| Mating Cycles | ≥ 500 |
| Coupling Nut Retention | N/A |
| Center Contact Captivation: axial | ≥ 27 N |
| Coupling Test Torque | 1.70 Nm max. |
| Recommended Torque | 0.9 Nm |

## 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 |

## Tooling

| | |
|---|---|
| Crimping tool | 11W150-000 |
| Crimp insert | 11W150-102 |

## Suitable Cable

RG 316/U, RG 174 A/U, RG188, G 022232, BELDEN 7805

## Packing

Single or 100

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