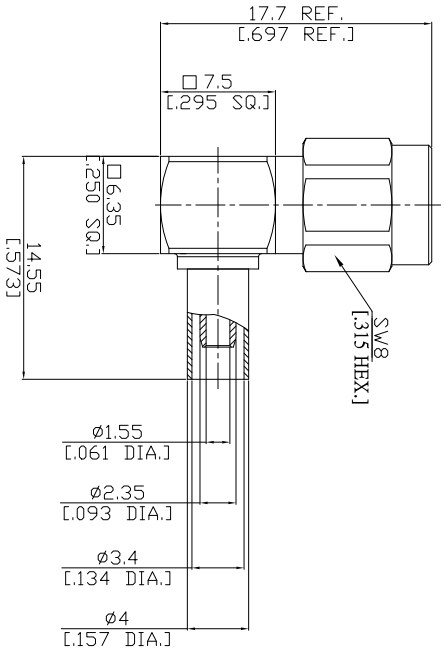
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

SMA Rightangle Cable Plug Attach For RG316D DC-6GHz VSWR1.30

SMA1C59-D316A / 933



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

Interface

According to	IEC 60169-15;CECC 22110; MIL-PRF-39012 SMA; MIL-STD-348/310

Electrical Data

Impedance	50 Ω
Frequency	DC to 6 GHz
VSWR (Return Loss)	≤ 1.30 (≥ 17.69 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	1000 V rms
Working Voltage	480 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	≤ 200 W @ 2 GHz
RF Leakage	≥ 100 dB up to 1 GHz

-VSWR in application depends decisive on cable assembly process-

Material And Plating

Piece Parts	Material	Plating
Centre Contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Brass	Nickel
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling Nut	Brass	Nickel
Crimp ferrules	Brass	Nickel

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.

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified

SMA Rightangle Cable Plug Attach For RG316D DC-6GHz VSWR1.30

SMA1C59-D316A / 933

Mechanical Data

Coupling mechanisms	Screw-lock
Mating Cycles	≥ 500
Coupling Nut Retention	≥ 270 N
Center Contact Captivation: axial	≥ 20 N
Coupling Test Torque	1.70 Nm max.
Recommended Torque	0.8 Nm to 1.1 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

Suitable Cable

RG 316/U-d, K 02252 D, 5YCC6Y 0.54/1.5

Packing

Single or 100

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.

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified