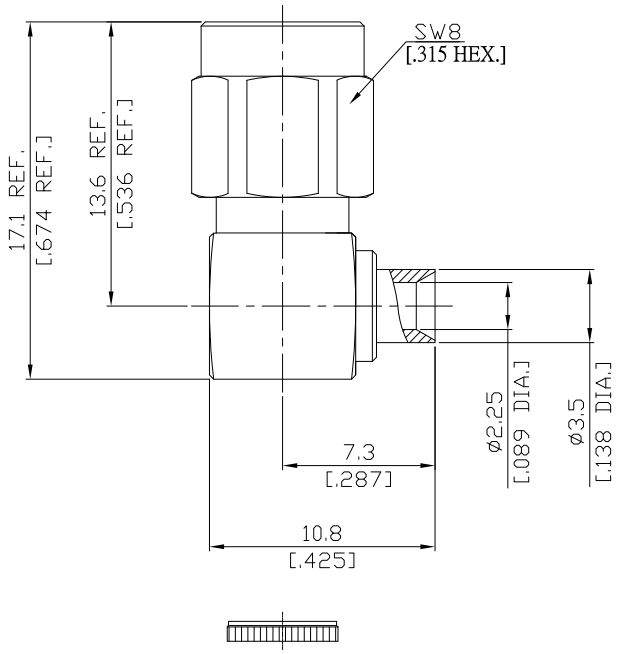
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Plug (Male) Right Angle Connector Solder Attachment for .085, RG405 Cable DC-12.4GHz VSWR1.25

SMA1E59-0085A / 111



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

Interface

According to	IEC 61169-15	MIL-STD-348B/310

Electrical Data

Impedance	50 Ω
Frequency	DC to 12.4 GHz
VSWR (Return Loss)	≤ 1.25 (≥ 19.08 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)	≤ 200 W @ 2 GHz

- Limitations are possible due to the used cable type -

Material And Plating

Piece Parts	Material	Plating
Centre contact	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Body	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Ferrule	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)

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Mechanical Data

Coupling Mechanisms	Screw-Lock
Mating Cycles	≥ 500
Coupling Nut Retention	≥ 270 N
Center contact captivation: axial	≥ 20 N
Coupling Test Torque	≤ 1.7 Nm
Recommended Torque	0.9 Nm
Centre Contact	Soldered
Cable Entry	Soldered

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

.085, .086, RG405 Cable

Weight

N/A

Packing

Single or 100

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