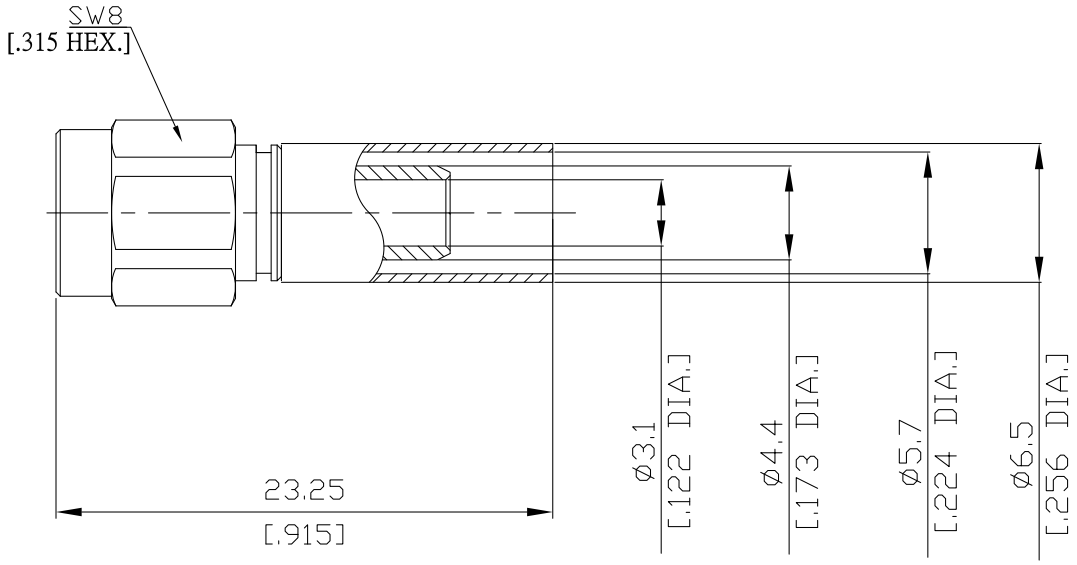
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Male Connector Crimp/Solder Attachment for RG142

SMA1C50-G142A / 133



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 12.4 GHz
VSWR (Return Loss)	≤ 1.20 (≥ 20.83 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

-VSWR in application depends decisive on cable assembly process-

Material And Plating

Piece Parts	Material	Plating
Centre Contact	Beryllium Cpooer	Gold plating(Nickel underplated)
Body	Brass	Nickel
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling Nut	Brass	Nickel
Crimp ferrules	Brass	Nickel

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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	1.70 Nm max.
Recommended Torque	0.8 Nm to 1.1 Nm
Centre contact	Soldered
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 Cable	
	RG55, RG 142, RG 223, RG 400
Packing	
	Single or 100

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