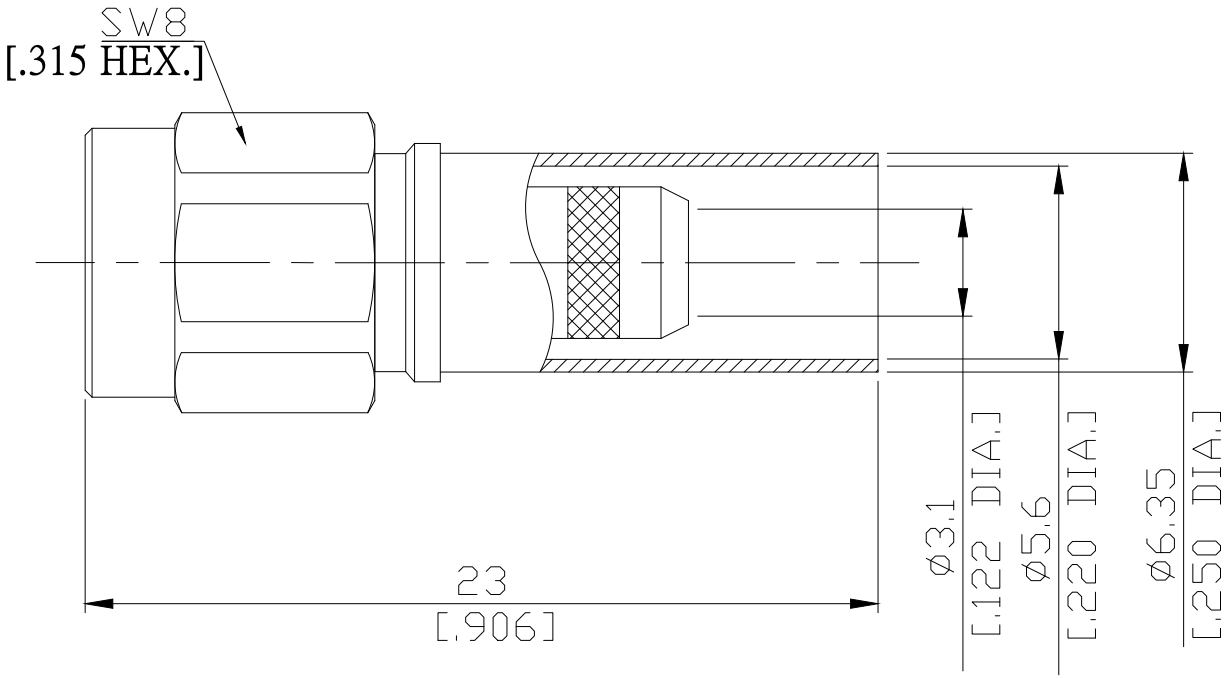
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Plug Male Connector Crimp/Solder Attachment for RG55, RG142, RG223 DC-18GHz VSWR1.20

SMA1C50-G142D / 9XX



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

Interface

According to	IEC 60169-15; MIL-STD-348B/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 18 GHz	
VSWR (Return Loss)	≤ 1.20 (≥ 20.83 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 (at sea level)	480 V rms	
Power Handling (at 20 °C, sea level, VSWR 1.0)	≤ 200 W @ 2 GHz	≥ 100 dB up to 1 GHz

Material And Plating

Connector parts	Material	Plating
Centre contact	Brass	Gold plating, 5 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Body	Stainless Steel	Passivated
Insulator	PTFE	
Coupling Nut	Stainless Steel	Passivated

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Mechanical Data

Coupling mechanisms	Screw-lock
Mating Cycles	min. 500
Centre Contact	Soldered
Cable Entry	Crimped
Coupling Test Torque	max. 1.7 Nm
Recommended Torque	0.8 Nm to 1.1 Nm

Environmental Data

Temperature Range	-65°C to +15°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond.D
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture Resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Suitable Cables

RG55, RG142, RG223

Packing

Single or 100

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