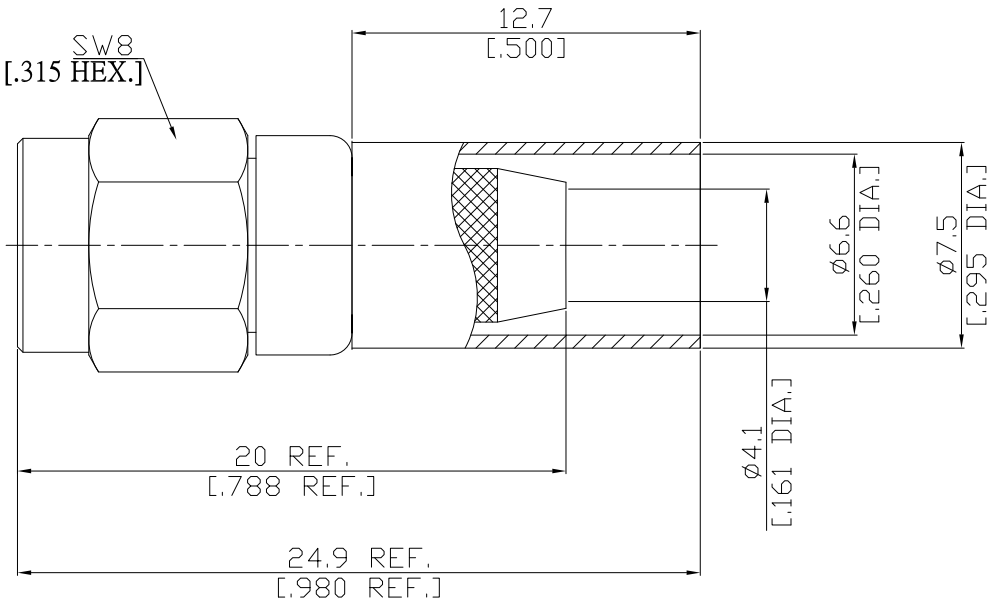
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Plug (Male) Straight Connector, Cable Entry: Crimp, Contact Pin: Solder or Crimp Attachment for LMR400, Rosnol RNL240 DC-8GHz VSWR1.30

SMA1C50-R240B / 111



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 8 GHz
VSWR (Return Loss)	≤ 1.30 (≥ 17.69 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	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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N-CAGE Code: SFKK0 / ISO9001 Certified

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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	≤ 1.7 Nm
Recommended Torque	0.9 Nm
Centre Contact	Soldered or Crimped
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 B
Shock	MIL-STD-202, Method 213, Condition I
Moisture Resistance	MIL-STD-202, Method 106
RoHS	compliant

Suitable Cables

LMR240, RNL240

Weight

N/A

Packing

Single or 100

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Assembly Instruction

SMA Plug (Male) Right Angle Connector Crimp/Contact Pin Solder Attachment for RG55, RG142, RG223, RG400, RG141 DC-6GHz VSWR1.20

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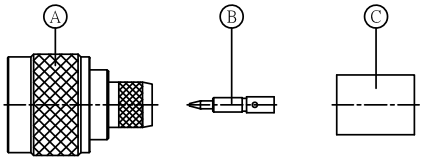
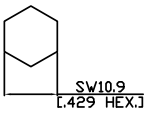
Connector Type:	N1C50-R400A2/144	Inner Conductor Contact:	Soldered
Suitable Cable:	LMR400, Rosnol RNL400	Outer Conductor Contact:	Crimped

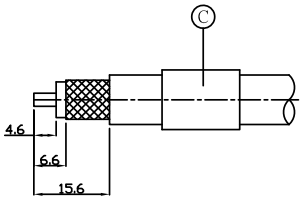
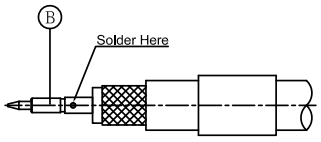
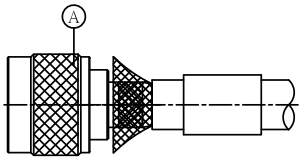
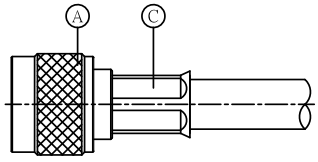
Parts List of Connector:



Crimped Ferrule
HEX. Crimp Size:



Assembly Steps:

Picture	Process	Attention/Check	Tools Required
	Push ferrule "C" over the cable. Prepare the cable according to the diagram.	Do not damage center contact, dielectric and braid.	Blade Scissor
	Solder center conductor "B" according to the diagram.		Solder Iron Solder Wire
	Splay out braid and insert cable in connector body "A" until it to stop.	Ensure that braid lies above crimp neck.	
	Slide ferrule "C" over braid and crimp.	Crimp as close to connector body "A" as possible. Do not damage connector body "A".	Crimp Tool: CT-L3 Crimp Insert: CI-L33F2A

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