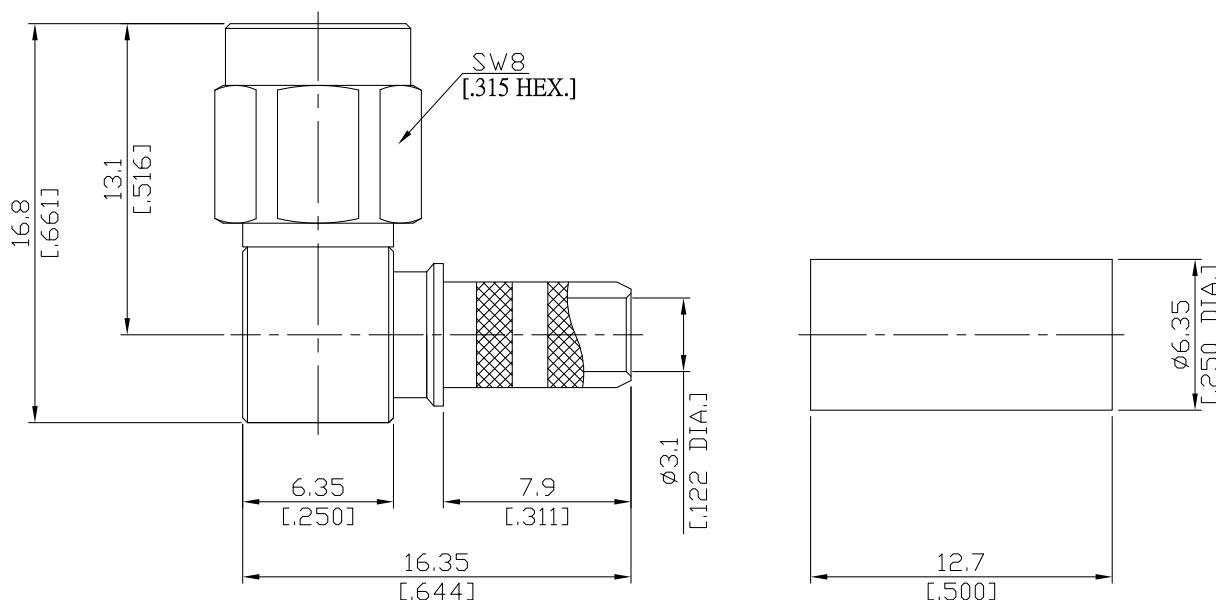


SMA Plug (Male) Right Angle Connector Crimp/Contact Pin Solder Attachment
for RG55, RG142, RG223, RG400, RG141 DC-6GHz VSWR1.20

SMA1C59-G142A / 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 6 GHz
VSWR (Return Loss)	≤ 1.20 (≥ 20.83 dB)
Insertion Loss	≤ 0.04 × √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)

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.

Rev.:
Date:
12/7/2020

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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	≥ 20 N
Coupling Test Torque	≤ 1.7 Nm
Recommended Torque	0.9 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 Cables

RG55, RG142, RG223, RG400, RG141

Weight

N/A

Packing

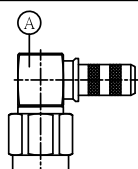
Single or 100

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

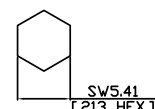
SMA1C59-G142A / 111

Connector Type:	SMA1C59-G142A/111	Inner Conductor Contact:	Soldered
Suitable Cable:	RG55, RG142, RG223, RG400, RG141	Outer Conductor Contact:	Crimped

Parts List of Connector:



Crimped Ferrule
HEX. Crimp Size:



Assembly Steps:

Picture	Process	Attention/Check	Tools Required
	Push ferrule "B" over the cable. Prepare the cable according to the diagram.	Do not damage center contact, dielectric and braid.	Blade Scissor
	Splay out braid and insert cable in connector body "A" until it to stop. Solder center conductor according to the diagram.	Ensure that braid lies above crimp neck.	Solder Iron Solder Wire
	Slide ferrule "B" 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
	Place cover "C" on rear aperture of body "A". Press cover "C" into body "B".		Small press or a small bench vice.

SMA Plug (Male) Right Angle Connector Crimp/Contact Pin Solder Attachment
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SMA1C59-G142A / 111

Cable Assembly P/N	A1C59-RG142-A1C59-325
Connector 1	SMA1C59-G142A/111
Connector 2	SMA1C59-G142A/111
Cable	RG142
Cable Length	325mm
Vector Network Analyzer (VNA)	Keysight N5235A
Calibration Kit	Keysight 85052D
Test Method	Port 1: SMA Jack (Female)
	Port 2: SMA Jack (Female)
	Port 1 + DUT + Port 2

