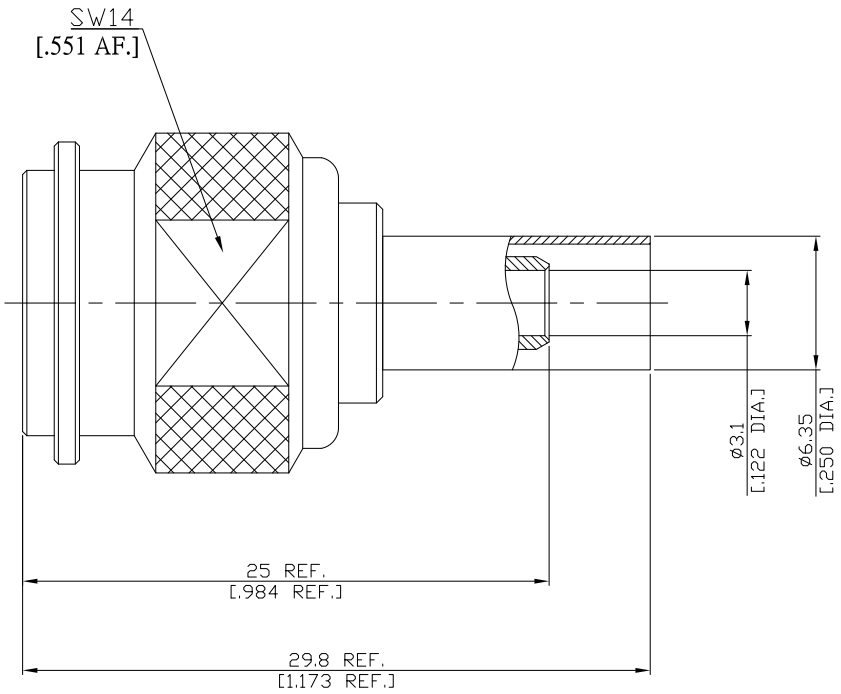
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

Reverse TNC Plug (Male) Connector Cable Entry: Crimp, Center Pin: Crimp or Solder Attachment for RG55, RG141, RG142, RG223, RG400 Cable, DC-3GHz VSWR1.20

TNC5C50-G142A / H44



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

Interface

According to	Derived From IEC 60169-17	Derived From MIL-STD-348B/313

Electrical Data

Impedance	50 Ω
Frequency	DC to 3 GHz
VSWR (Return Loss)	≤ 1.20 (≥ 20.83 dB)
Insertion Loss	≤ 0.05 dB
Insulation Resistance	≥ 5 GΩ
Center Contact Resistance	≤ 1.5 mΩ
Outer Contact Resistance	≤ 1.0 mΩ
Test Voltage	1500 V rms
Working Voltage	500 V rms
Power handling (at 20 °C, sea level)	≤ 80 W @ 2 GHz

- Limitations are possible due to the used cable type -

Material And Plating

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

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Mechanical Data

Coupling Mechanisms	Screw-Lock
Mating Cycles	≥ 500
Center Contact Captivation: axial	≥ 15 N
Centre Contact	Crimped or Soldered
Cable Entry	Crimped
Coupling Test Torque	≤ 1.7 Nm
Recommended Torque	1.36 Nm

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 G
Moisture Resistance	MIL-STD-202, Method 106
RoHS	compliant

Suitable Cables

RG55, RG142, RG223, RG400

Packing

Single or 100

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Assembly Instruction

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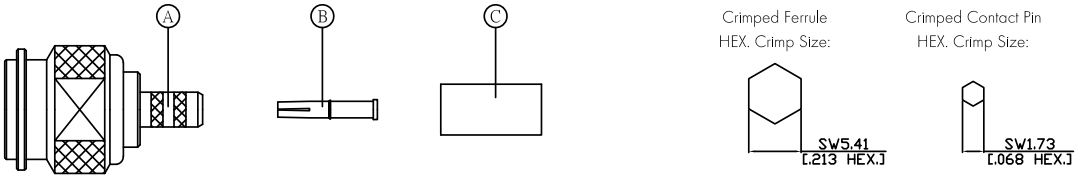
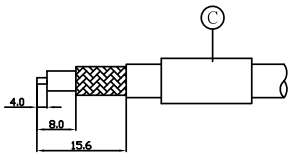
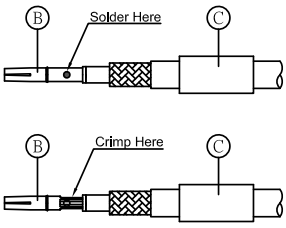
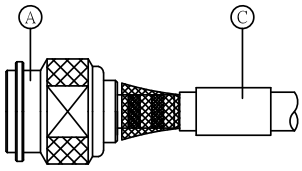
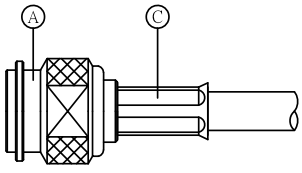
Connector Type:	TNC5C50-G142A/H33, TNC5C50-G142A/H44	Inner Conductor Contact:	Soldered or Crimped
Suitable Cable:	RG55, RG141, RG142, RG223, RG400	Outer Conductor Contact:	Crimped

Parts List of Connector:



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 Schleuniger Coax Stripping
	Push contact "B" over inner conductor of cable and solder or crimp	Do not damage to dielectric.	Soldered: Solder Iron Solder Wire Crimped: Crimp tool: CT-L3 Crimp insert: CI-L33GA
	Splay out braid and insert cable in connector body "A" until it to stop.	Ensure that braid lies above crimp neck	Crimp Tool: CT-L3 Crimp Insert: CI-L33F2A
	Slide ferrule "C" over braid and crimp	Crimp as close to connector body "A" as possible	Crimped: Crimp tool: CT-L3 Crimp insert: CI-L33GA

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