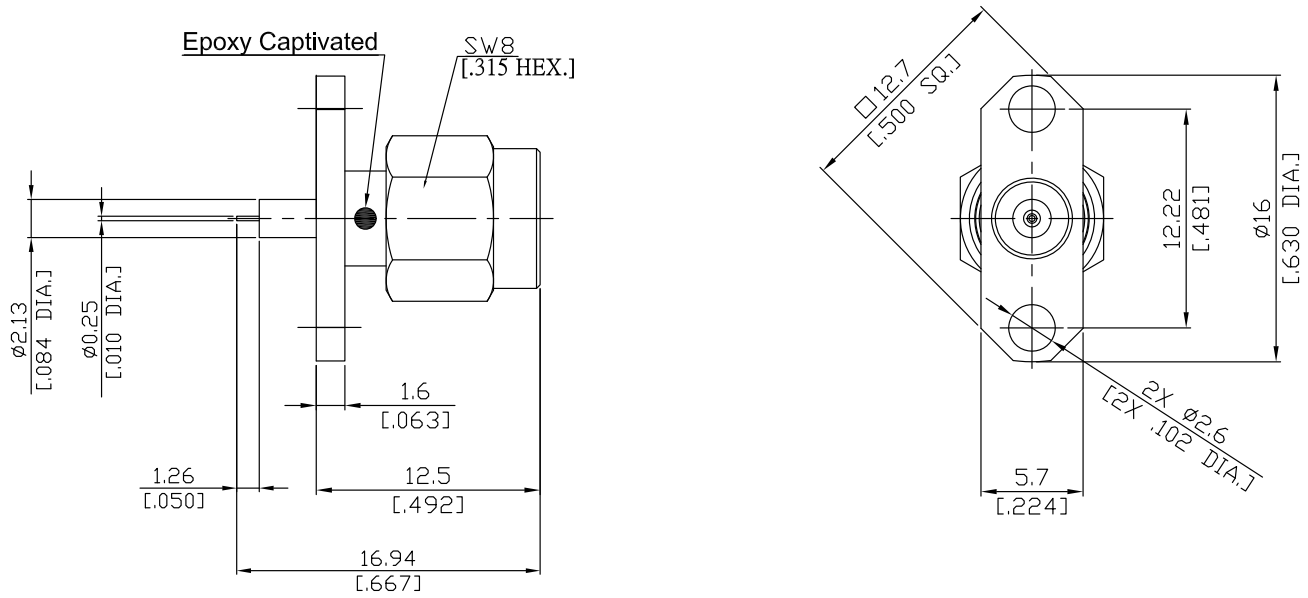
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

SMA plug (male) Connector Solder Attachment 2 Hole Flange Mount Stub Terminal, 12.22mm (.481 inch) Hole Spacing DC-18GHz VSWR1.30

SMA1GTA50-1694A-EC / 9XX



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 18 GHz
VSWR (Return Loss)	≤ 1.30 (≥ 17.7 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

Material And Plating

Piece Parts	Material	Plating
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinch)
Body	Stainless Steel	Passivated
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Stainless Steel	Passivated

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified

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Mechanical Data	
Coupling mechanisms	Screw-lock
Mating Cycles	≥ 500
Centre Contact	Soldered
Terminal Type	Stub
Captivated Type	Epoxy Captivation
Center Contact Captivation: axial	≥ 27 N
radial	≥ 3 Ncm
Coupling Test Torque	max. 1.7 Nm
Recommended Torque	0.8 Nm to 1.1 Nm
Environmental Data	
Temperature Range	-65°C to +165°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
Packing	
	Single or 100

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