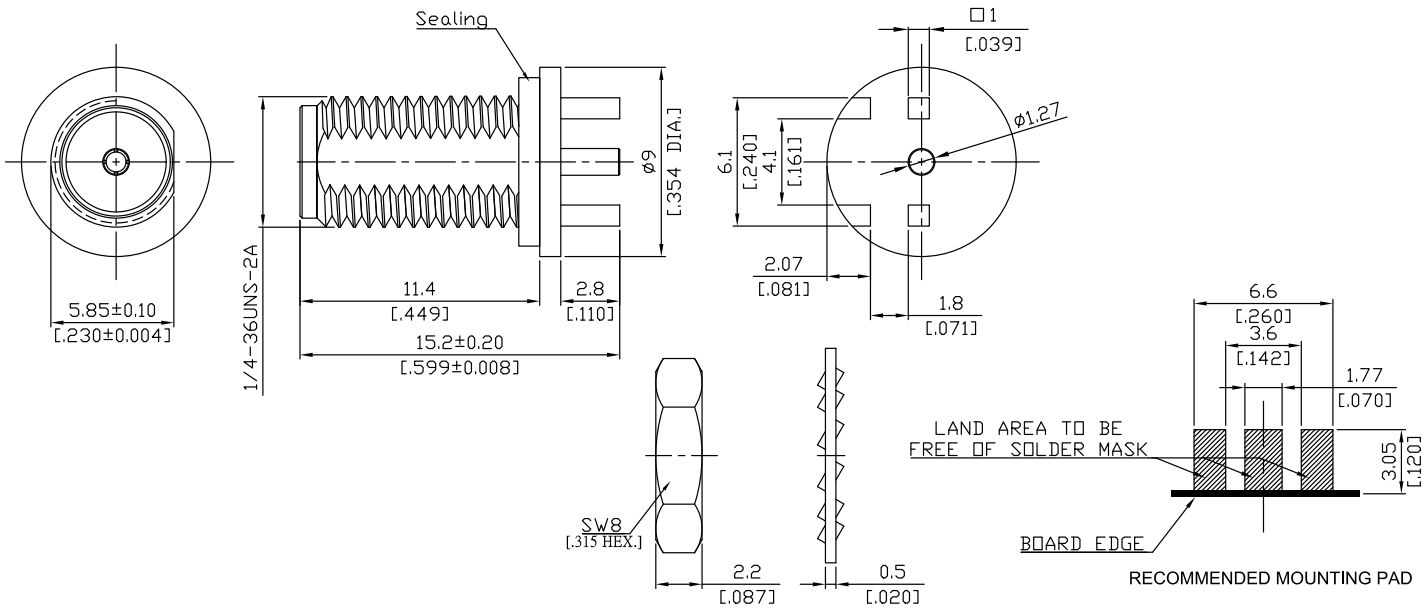
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Jack (female) Straight PCB End Launch Connector For Bulkhead DC-18GHz

SMA2H5C50-1520A / 91



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

Interface

According to	IEC 60169-15;CECC 22110; MIL-PRF-39012 SMA; MIL-STD-348/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 18 GHz	
VSWR (Return Loss)	≤ 1.25 (≥ 19.08 dB)	
Insertion loss	≤ 0.04 x √F (GHz) dB	
Insulation Resistance	≥ 5 GΩ	
Center Contact Resistance	≤ 3.0 mΩ	
Outer Contact Resistance	≤ 2.0 mΩ	
Test Voltage (at sea level)	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 W @ 10 GHz
RF Leakage	≥ 100 dB up to 1 GHz	

-VSWR in application depends decisive on PCB layout or cavity design-

Material And Plating

Connector parts	Material	Plating
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 100 μinch)
Body	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 100 μinch)
Insulator	PTFE	
Fastening Nut	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 100 μinch)
Washer	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 100 μinch)
Gasket	Silicon Rubber	

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	min. 500
Center contact captivation: axial	≥ 20 N
Board mounting type	End Launch
Coupling test torque	max. 1.7 Nm
Recommended torque	0.8 Nm to 1.1 Nm
Environmental Data	
Temperature Range	-55°C to +125°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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