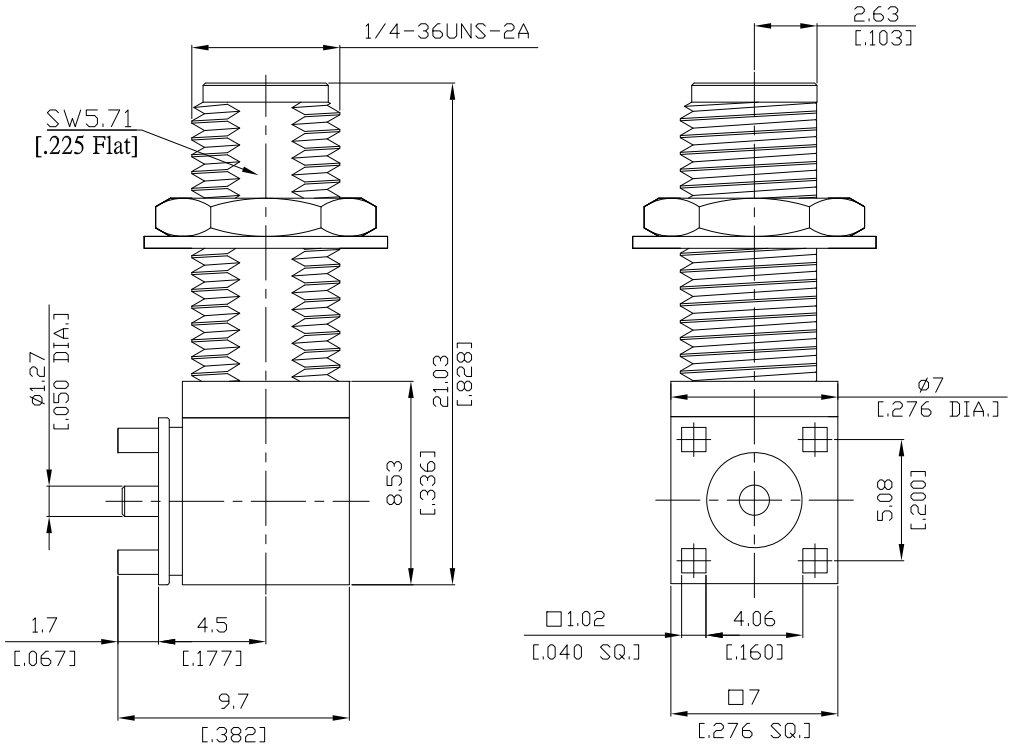
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

SMA Jack (female) PCB Through Holes Right Angle For Bulkhead Connector DC-18GHz VSWR1.25

SMA2IA59-2103C / 91



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 18 GHz
VSWR (Return Loss)	≤ 1.25 (≥ 19.1 dB)
Insertion Loss	≤ 0.04 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; ≤ 100 W @ 10 GHz
RF-leakage	100 dB up to 1 GHz

Material And Plating

Connector parts	Material	Plating
Centre contact	Beryllium Copper	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	

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

SMA Jack (female) PCB Through Holes Right Angle For Bulkhead Connector DC-18GHz VSWR1.25

SMA2IA59-2103C / 91

Mechanical Data

Coupling mechanisms	Screw-lock
Mating cycles	min. 500
Center contact captivation: axial	≥ 27 N
Board mounting type	Through Holes
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

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