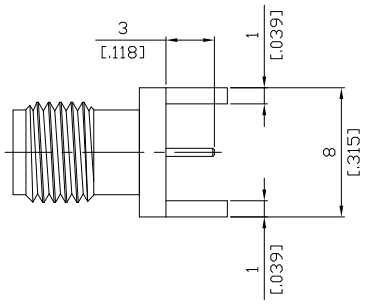
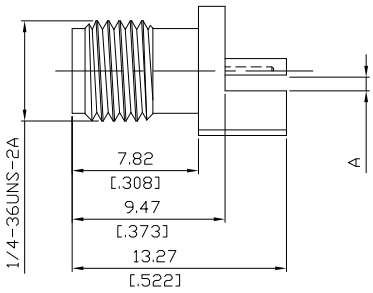
ROSNOL®
RF/Microwave Interconnect

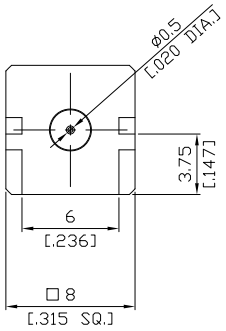
Technical Data Sheet

SMA Jack(female) PCB End Launch Straight Coaxial Pin Air Teflon Design

SMA2H1A50-XXXXB / 91







Part Number	ΦA
SMA2H1A50-0060B/91	0.60 [.024]
SMA2H1A50-0080B/91	0.80 [.031]
SMA2H1A50-0100B/91	1.00 [.039]
SMA2H1A50-0110B/91	1.10 [.043]
SMA2H1A50-0120B/91	1.20 [.047]
SMA2H1A50-0130B/91	1.30 [.051]
SMA2H1A50-0150B/91	1.50 [.059]
SMA2H1A50-0160B/91	1.60 [.063]
SMA2H1A50-0173B/91	1.73 [.068]
SMA2H1A50-0210B/91	2.10 [.083]
SMA2H1A50-0225B/91	2.25 [.089]
SMA2H1A50-0360B/91	3.60 [.142]

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)	≤1.20 (≥20.83 dB) DC to 6GHz	≤1.30 (≥17.69 dB) 6 to 18GHz
Insertion loss	≤ 0.03 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	480 V rms	
Power handling	≤ 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 End Launch Straight Coaxial Pin Air Teflon Design

SMA2H1A50-XXXXB / 91

Mechanical Data

Coupling mechanisms	Screw-lock
Mating cycles	min. 500
Center contact captivation: axial	≥ 27 N
radial	≥ 1 Ncm
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	–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