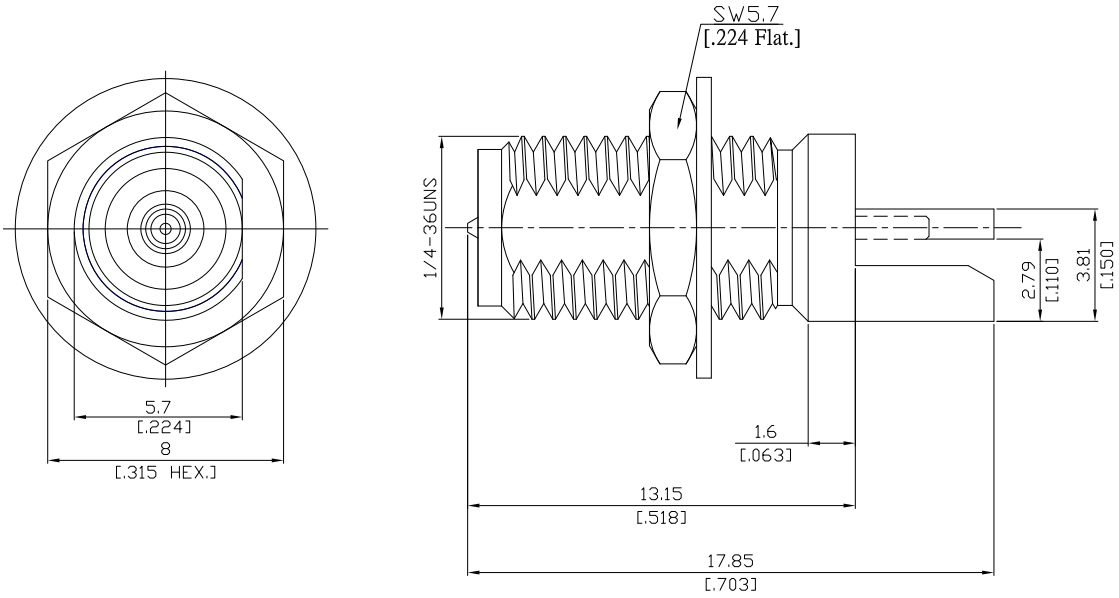
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

Reverse Polarity SMA Jack (RP female) PCB End Launch Straight Coaxial Pin Teflon Design For Bulkhead DC-18 GHz

SMA7H1C50-3543A / 11



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	
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	Brass	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	
Fastening nut	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Washer	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)

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

Reverse Polarity SMA Jack (RP female) PCB End Launch Straight Coaxial Pin Teflon Design For Bulkhead DC-18 GHz

SMA7H1C50-3543A / 11

Mechanical Data

Coupling mechanisms	Screw-lock
Mating cycles	min. 500
Center contact captivation: axial	≥ 27 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	-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