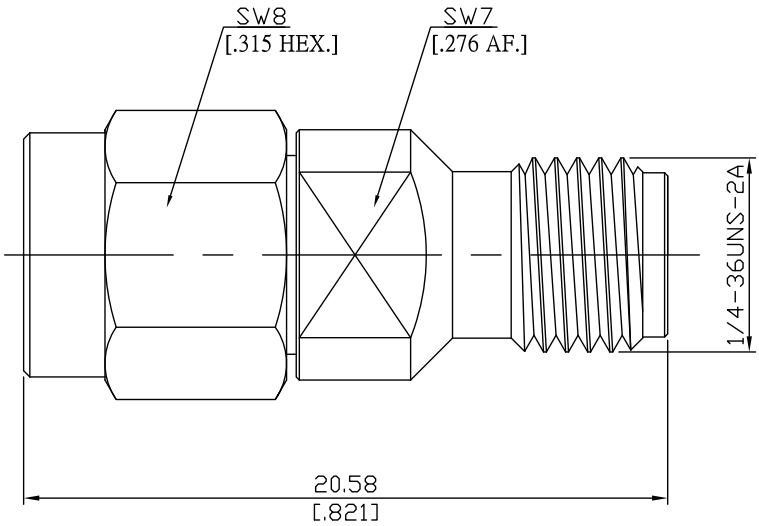
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

Precision SMA Plug (Male) to Precision SMA Jack (Female) Adapter DC-27GHz VSWR1.15

AD-PCA1PCA25B / 911-91



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

Interface

Mechanically compatible with	2.92mm, 3.5mm
According to	IEC 60169-15, MIL-STD-348B/310

Electrical Data

Impedance	50 Ω
Frequency	DC to 27 GHz
VSWR (Return Loss)	≤ 1.15 (≥ 23.13 dB)
Insertion Loss	≤ 0.04 x √F (GHz) dB
Insulation Resistance	≥ 5 GΩ
Center Contact Resistance	≤ 3mΩ
Outer Contact Resistance	≤ 2mΩ
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
RF Leakage	≥ 100 dB up to 1 GHz

Material And Plating

Piece Parts (Precision SMA)	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	
Gasket	Silicone Rubber	
Coupling nut	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinch)
Piece Parts (Precision SMA)	**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

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Mechanical Data

Coupling mechanisms	Screw-lock
Mating Cycles	≥ 500
Coupling Nut Retention	≥ 270 N
Center Contact Captivation: axial	≥ 20 N
radial	≥ 3 N.cm.
Weight	N/A
Coupling Test Torque	1.70 Nm max.
Recommended Torque	0.9 Nm

Environmental Data

Temperature Range	-55°C to +165°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture Resistance	MIL-STD-202, Method 106
RoHS	compliant

Packing

Single or 100

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