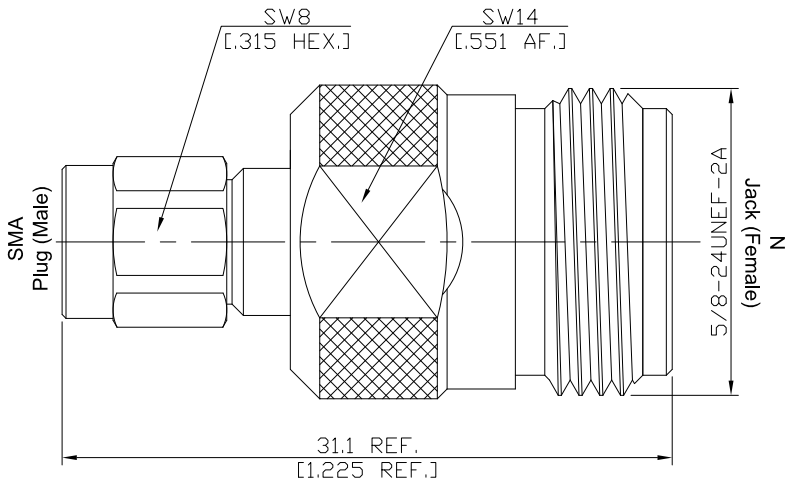
ROSNOL® RF/Microwave Interconnect

Technical Data Sheet

SMA Plug (Male) to N Jack (Female) Straight Adapter, DC – 12 GHz, VSWR 1.15

AD-A1N25A / 133-93



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

Interface

SMA According to	IEC 60169-15; CECC 22110; MIL-PRF-39012; MIL-STD-348B/310; EN 122110
N According to	IEC 60169-16; MIL-STD-348B/304; CECC 22210; MIL-PRF-39012

Electrical Data

Impedance	50 Ω	
Frequency	DC to 12 GHz	
VSWR (Return Loss)	≤ 1.15 (≥ 23.13 dB)	
Insertion Loss	≤ 0.04 x √F (GHz) dB	
Insulation resistance	≥ 5 GΩ	
Center contact resistance	≤ 3 mΩ, SMA side	≤ 1 mΩ, N side
Outer contact resistance	≤ 2 mΩ, SMA side	≤ 0.25 mΩ, N side
Test voltage	1000 V rms	
Working voltage	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 (SMA)	Material	Plating
Centre contact	Brass	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Brass	Nickel
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Nickel
Piece Parts (N)	**Material**	**Plating**
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Brass	Nickel
Insulator	PTFE	

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Mechanical Data

	SMA side	N side
Coupling mechanisms	Screw-On	Screw-On
Mating cycles	min. 500	min. 500
Coupling nut retention	≥ 270 N	≥ 450 N
Center contact captivation: axial	≥ 28 N	≥ 28 N
Coupling test torque	max. 1.70 Nm	max 1.70 Nm
Recommended torque	0.57 Nm	1.0 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

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