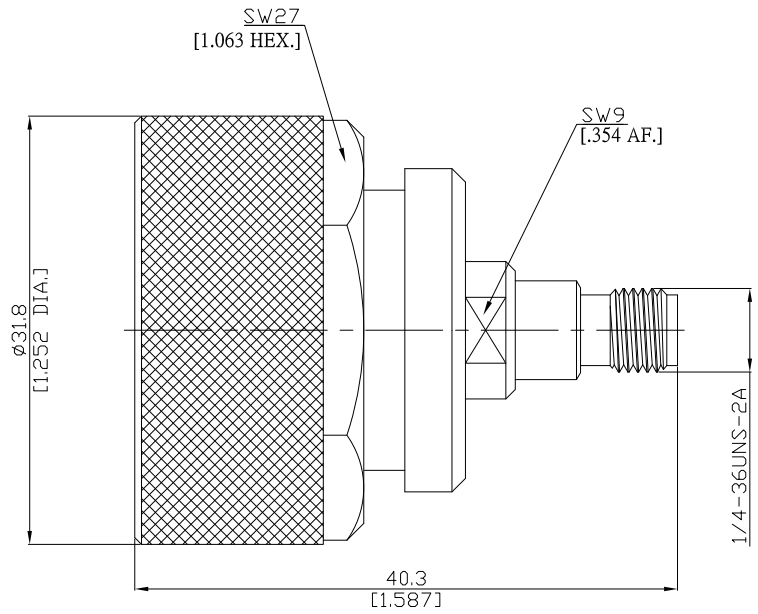
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

7/16 plug (male) / SMA jack (female) Straight Adapter
DC-8.3 GHz VSWR 1.20

AD-D1A25A / 044-84



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

Interface

7/16 according to	IEC 61169-4
SMA according to	IEC 60169-15; MIL-STD-348B/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 8.3 GHz	
VSWR (Return Loss)	≤ 1.20 (≥ 21 dB)	
Insertion Loss	≤ 0.03 x √F (GHz) dB	
Insulation Resistance	≥ 5 GΩ	
Center contact resistance	≤ 3 mΩ, SMA side	≤ 0.4 mΩ, 7-16 side
Outer contact resistance	≤ 2 mΩ, SMA side	≤ 1.5 mΩ, 7-16 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 (7/16)	Material	Plating
Centre contact	Brass	Silver
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Copper-Tin-Zinc Alloy
Piece Parts (SMA)	**Material**	**Plating**
Centre contact	Beryllium Copper	Silver
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	

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Mechanical Data

	7/16 side	SMA side
Coupling mechanisms	Screw-lock	Screw-lock
Mating cycles	≥ 500	≥ 500
Coupling nut retention	≤ 1000 N	N/A
Center contact captivation: axial	≥ 200 N	≥ 200 N
Coupling test torque	max. 35 Nm	max. 0.6 Nm
Recommended torque	25 to 30 Nm	0.5 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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