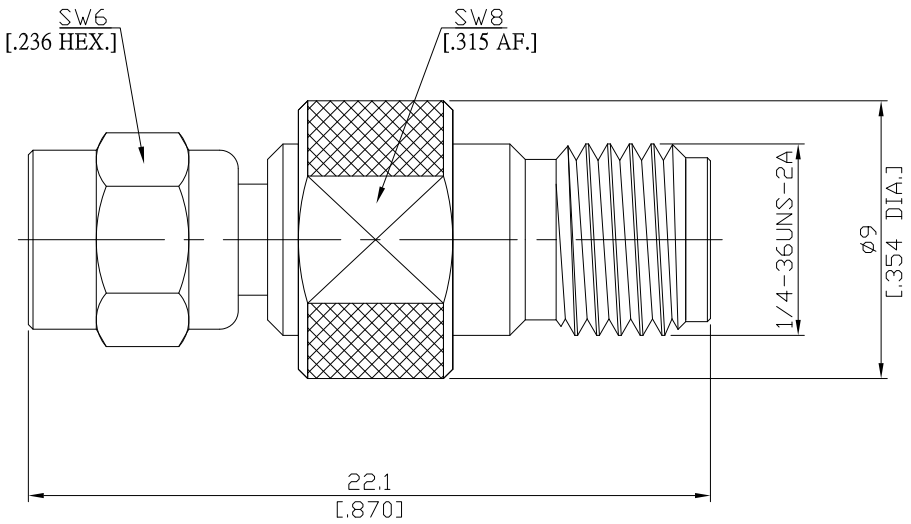
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

SMC plug (male) / SMA jack (female)
Adapter DC-10 GHz VSWR1.35

AD-MC1A25A / 911-91



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

Interface

SMC side according to	IEC 60169-9; MIL-STD-348B/312
SMA side according to	IEC 60169-15; MIL-STD-348B/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 10 GHz	
VSWR (Return Loss)	≤ 1.35 (≥ 16.54 dB)	
Insertion Loss	≤ 0.05 x √F (GHz) dB	
Insulation resistance	≥ 1 GΩ	
Center Contact Resistance	≤ 5 mΩ, SMC side	≤ 3 mΩ, SMA side
Outer Contact Resistance	≤ 2.5 mΩ, SMC side	≤ 2 mΩ, SMA side
Test voltage	750 V rms, 50 Hz, at sea level	
Working voltage	≤ 250 V rms, 50 Hz, at sea level	
RF-leakage	≥ 90 dB up to 1 GHz	

Material And Plating

Piece Parts (SMC)	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	
Coupling nut	Brass	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Piece Parts (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	

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Mechanical Data

	SMC Side	SMA Side
Coupling mechanisms	Screw-lock	Screw-lock
Mating Cycles	min. 500	min. 500
Coupling nut retention	≥ 150 N	N/A
Coupling test torque	max. 0.71 Nm	max. 1.7 Nm
Recommended torque	0.25 Nm to 0.35 Nm	0.8 Nm to 1.1 Nm
Center contact captivation: axial	≥ 10 N	≥ 10 N

Environmental Data

Temperature Range	-65°C to +165°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond. D
Moisture resistance	MIL-STD-202, Meth. 106
Corrosion	MIL-STD-202, Meth. 101, Cond B
RoHS	compliant

Packing

Single or 100

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