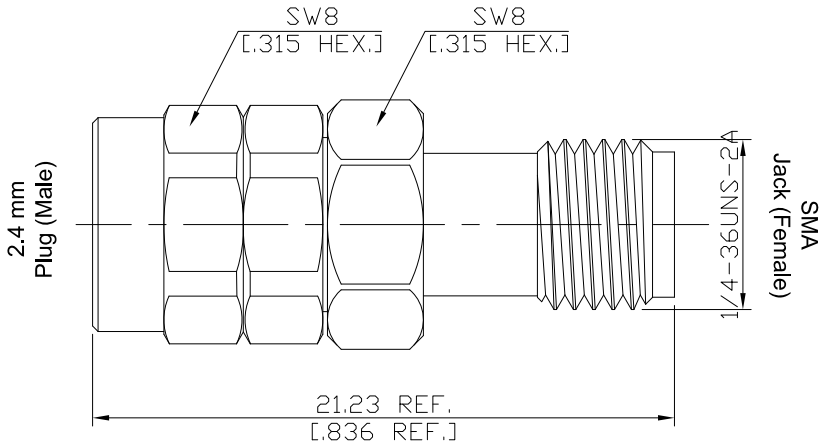
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

2.4mm Plug (Male) / SMA Jack (Female)
Straight Adapter DC-18GHz VSWR1.15

AD-Q1A25A / 9XX-9X



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

Interface

2.4mm According to	IEC 61169-40; IEEE Std 287; MIL-STD-348B/324
2.4mm Mechanically compatible with	1.85 mm
SMA According to	IEC 60169-15; CECC 22110; MIL-PRF-39012; MIL-STD-348B/310; EN 122110
SMA Mechanically compatible with	2.92 mm and 3.5 mm

Electrical Data

Impedance	50 Ω	
Frequency	DC to 18 GHz	
VSWR (Return Loss)	≤ 1.15 (≥ 23.13 dB)	
Insertion Loss	≤ 0.05 x √F (GHz) dB	
Insulation Resistance	≥ 5 GΩ	
Center Contact Resistance	≤ 4 mΩ, 2.4mm side	≤ 3 mΩ, SMA side
Outer Contact Resistance	≤ 2.5 mΩ, 2.4mm side	≤ 2 mΩ, SMA side
Test Voltage (at sea level)	500 V rms	
Working Voltage (at sea level)	150 V rms	
RF Leakage	≥ 100 dB up to 1 GHz	

Material And Plating

Piece Parts (2.4mm)	Material	Plating
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Stainless Steel	Passivated
Insulator	PEI	
Gasket	Silicone Rubber	
Coupling nut	Stainless Steel	Passivated
Piece Parts (SMA)	**Material**	**Plating**
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Stainless Steel	Passivated
Insulator	PTFE	

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Mechanical Data

	2.4mm Side	SMA Side
Coupling mechanisms	Screw-lock	Screw-lock
Mating Cycles	≥ 500	≥ 500
Center Contact Captivation	≥ 20 N	≥ 20 N
Coupling Test Torque	1.65 Nm max.	1.70 Nm max.
Recommended Torque	0.80 Nm to 1.10 Nm	0.80 Nm to 1.10 Nm

Environmental Data

Temperature Range	-65°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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