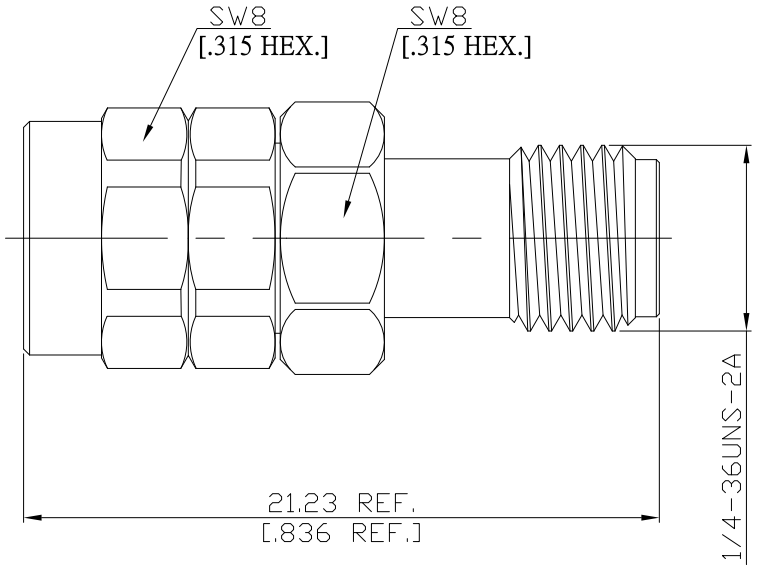
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

2.4mm plug (male) / SMA jack (female)
Straight Adapter DC-18GHz VSWR1.15

AD-Q1A25B / 9XX-9X



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

Interface

	2.4mm Side	SMA Side
Mechanically compatible with	1.85mm	2.92mm and 3.5mm
According to	IEC 61169-40, IEEE Std 287	IEC 60169-15, MIL-STD-348B/310

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 2.4mm	≤ 4 mΩ
Outer Contact Resistance 2.4mm	≤ 2.5 mΩ
Center Contact Resistance SMA	≤ 3 mΩ
Outer Contact Resistance SMA	≤ 2 mΩ
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, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinch)
Body	Stainless Steel	Passivated
Insulator	PS	
Gasket	Silicone Rubber	
Coupling nut	Stainless Steel	Passivated
Piece Parts (SMA)	**Material**	**Plating**
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinch)
Body	Stainless Steel	Passivated
Insulator	PS	

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

	2.4mm Side	SMA Side
Coupling mechanisms	Screw-lock	Screw-lock
Mating Cycles	≥ 500	≥ 500
Coupling Nut Retention	≥ 270 N	≥ 270 N
Center Contact Captivation	≥ 20 N	≥ 20 N
Coupling Test Torque	1.65 Nm max.	1.70 Nm max.
Recommended Torque	0.9 Nm	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

Standard	Single
Weight	N/A

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