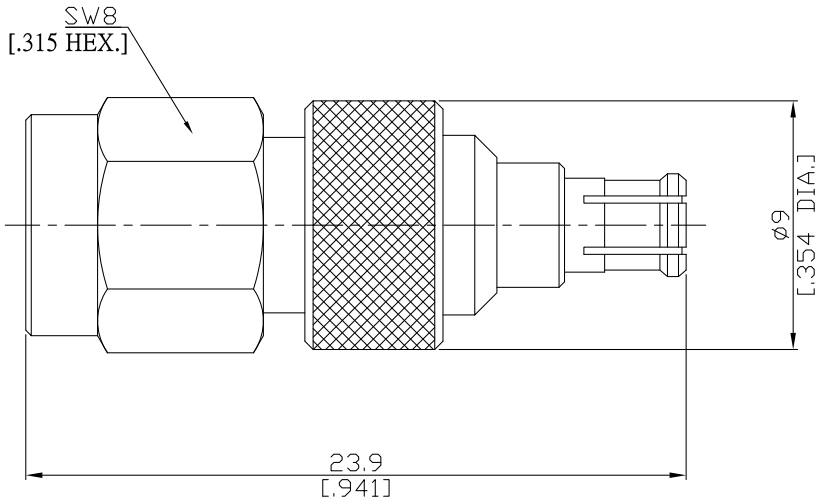
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

SMA plug (male) / MCX plug (male)
Straight adaptor DC- 6 GHz VSWR ≤ 1.20

AD-A1M15A / 111-1H



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

Interface

SMA according to	IEC 60169-15; MIL-STD-348B/310
MCX according to	IEC 60169-36

Electrical Data

Impedance	50 Ω	
Frequency	DC to 6 GHz	
VSWR (Return Loss)	≤ 1.20 (≥ 20.8 dB)	
Insertion loss	≤ 0.05 x √F (GHz) dB	
Insulation resistance	≥ 1 GΩ	
Center contact resistance	≤ 3 mΩ, SMA side	≤ 5.0 mΩ, MCX side;
Outer contact resistance	≤ 2 mΩ, SMA side	≤ 2.5 mΩ, MCX side;
Test voltage	750 V rms	
Working voltage	335 V rms	
Contact Current	1.5A DC max.	

Material And Plating

Piece Parts (SMA)	Material	Plating
Centre contact	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Body	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Piece Parts (MCX)	**Material**	**Plating**
Centre contact	Brass	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Body	Phosphor Bronze	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Insulator	PTFE	

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Mechanical Data

	SMA side	MCX side
Coupling mechanisms	Screw-lock	Snap-lock
Mating cycles	≥ 500	≥ 500
Center contact captivation: axial	≥ 27 N	≥ 27 N
Engagement force	N/A	≤ 25 N
Disengagement force	N/A	8 N min. to 20 N max.
Coupling test torque	max. 1.7 Nm	N/A
Recommended torque	0.8 Nm to 1.1 Nm	N/A

Environmental Data

Temperature range	-55°C to +155°C
Thermal shock	CECC 22 220, Chapter 4.6.7
Vibration	CECC 22 220, Chapter 4.6.3
Corrosion	CECC 22 220, Chapter 4.6.10
Moisture resistance	CECC 22 220, Chapter 4.6.6
RoHS	compliant

Packing

Singleor 100

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