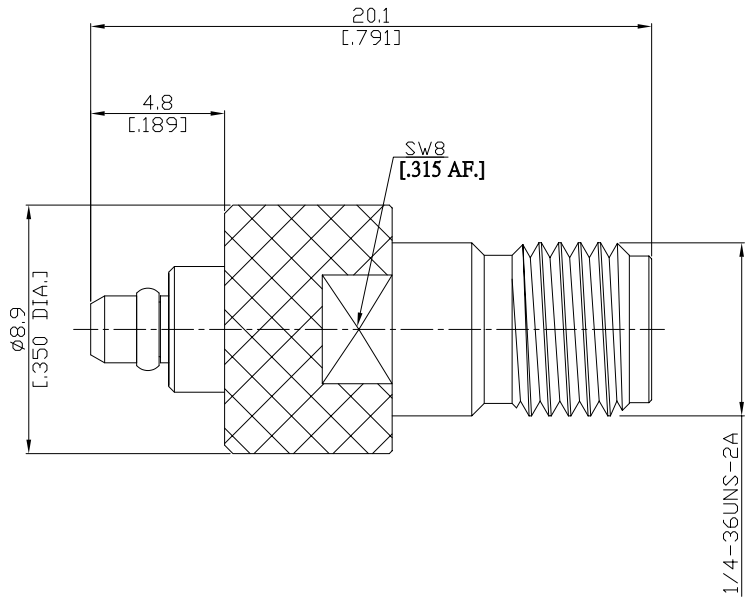
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

MMCX plug (male) / SMA jack (female)
Straight adaptor DC- 6 GHz VSWR ≤ 1.20

AD-MX1A25A / 91-91



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

Interface

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

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	≤ 5.0 mΩ, MMCX side;	≤ 3 mΩ, SMA side
Outer contact resistance	≤ 2.5 mΩ, MMCX side;	≤ 2 mΩ, SMA side
Test voltage	750 V rms	
Working voltage	335 V rms	
Contact Current	1.5A DC max.	

Material And Plating

Piece Parts (MMCX)	Material	Plating
Centre contact	Beryllium Copper	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	
Piece Parts (SMA)	**Material**	**Plating**
Centre contact	Beryllium Copper	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	

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Mechanical Data

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

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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