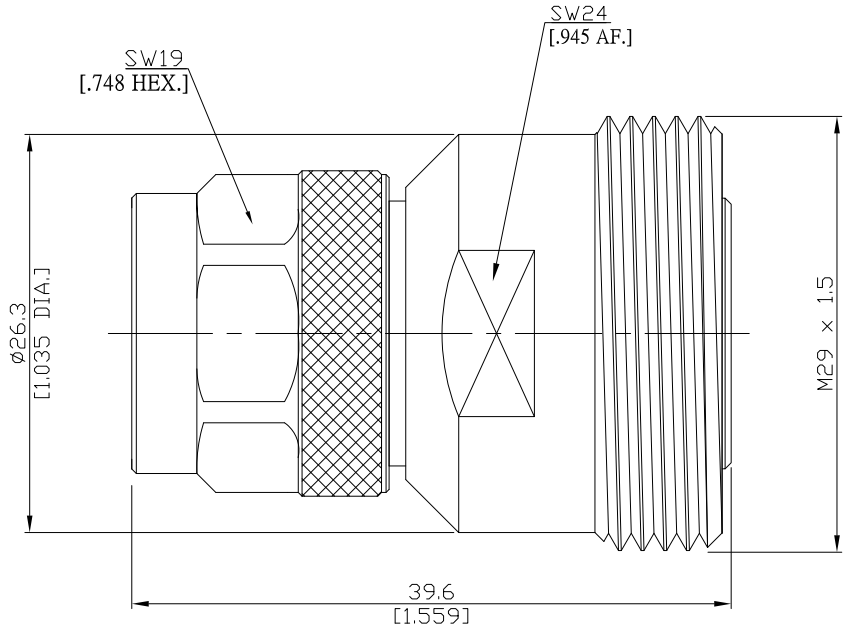
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

N plug (male) / 7/16 jack (female)
DC-7.5 GHz VSWR1.15

AD-N1D25A / 944-94



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

Interface

N according to	IEC 61169-16; MIL-STD-348B/304
7/16 according to	IEC 61169-4

Electrical Data

Impedance	50 Ω	
Frequency	DC to 7.5 GHz	
VSWR (Return Loss)	≤ 1.15 (≥ 23 dB)	
Insertion loss	≤ 0.05 x √f(GHz)	
Insulation resistance	≥ 5 GΩ	
Center contact resistance	≤ 1 mΩ, N side;	≤ 0.4 mΩ, 7-16 side
Outer contact resistance	≤ 0.25 mΩ, N side;	≤ 1.5 mΩ, 7-16 side
Working voltage	500 V rms	
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz	700 W @ 2 GHz
RF-leakage	≥ 128 dB up to 1 GHz	

Material And Plating

Piece Parts (N)	Material	Plating
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Copper-Tin-Zinc Alloy
Piece Parts (7/16)	**Material**	**Plating**
Centre contact	Beryllium Copper	Gold plating, 3 μinch (Non-magnetic nickel-phosphorus underplating, 80 μinc)
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	

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N-CAGE Code: SFKK0 / ISO9001 Certified

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Mechanical Data

	N side	7/16 side
Coupling mechanisms	Screw-lock	Screw-lock
Mating cycles	≥ 500	≥ 500
Coupling nut retention	≥ 450 N	≥ 1000 N
Center contact captivation: axial	≥ 200 N	≥ 200 N
radial	≥ 3 Ncm	≥ 3 Ncm
Coupling test torque	max. 1.7 Nm	max. 35 Nm
Recommended torque	0.7 Nm to 1.1 Nm	25 to 30 Nm

Environmental Data

Temperature range	-65°C to +165°C
Rapid change of temperature	IEC 60068-2-14 Test Na
Corrosion salt mist	IEC 60068-2-11 Test Ka
Vibration	IEC 60068-2-6 Test Fc
Shock	IEC 60068-2-27 Test Ea
Climatic class	IEC 60068-1 (45/85/56)
Cold	IEC 60068-2-1 Test A
Dry heat	IEC 60068-2-2 Test B
Damp heat (steady state)	IEC 60068-2-3 Test Ca
Degree of protection (mated pair)	IEC 60529, IP68
RoHS	compliant

Packing

Single or 100

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