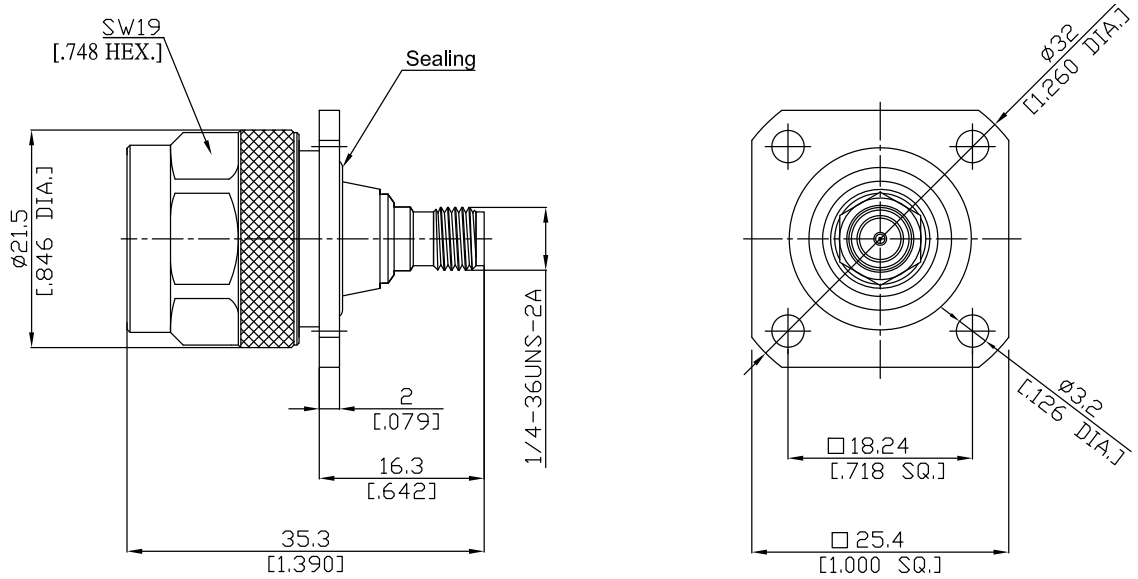
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

N plug (male) / SMA jack (female)
4-Hole Panel Adapter, DC-11 GHz, VSWR ≤ 1.15

AD-N1A25A-PF / 144-91



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

Interface

N according to	IEC 61169-16; MIL-STD-348B/304
SMA according to	IEC 60169-15; MIL-STD-348B/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 11 GHz	
VSWR (Return Loss)	≤ 1.15 (≥ 23.1 dB)	
Insertion loss	≤ 0.05 x √F (GHz) dB	
Insulation resistance	≥ 5 GΩ	
Center contact resistance	≤ 1 mΩ, N side	≤ 3 mΩ, SMA side
Outer contact resistance	≤ 0.25 mΩ, N side	≤ 2 mΩ, SMA side
Working voltage	480 V rms	
Power handling (at 20 °C, sea level, VSWR 1.0)	≤ 200 W @ 2 GHz	
RF-leakage	≥ 100 dB up to 1 GHz	

Material And Plating

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

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N-CAGE Code: SFKK0 / ISO9001 Certified

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Mechanical Data

	N side	SMA side
Coupling mechanisms	Screw-lock	Screw-lock
Mating cycles	min. 500	min. 500
Coupling nut retention	≥ 450 N	N/A
Center contact captivation: axial	≥ 28N	≥ 28N
Coupling test torque	max. 1.7 Nm	max. 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm	0.8 Nm to 1.1 Nm

Environmental Data

Temperature Range	-65°C to +165°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond. D
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Packing

Singleor 100

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