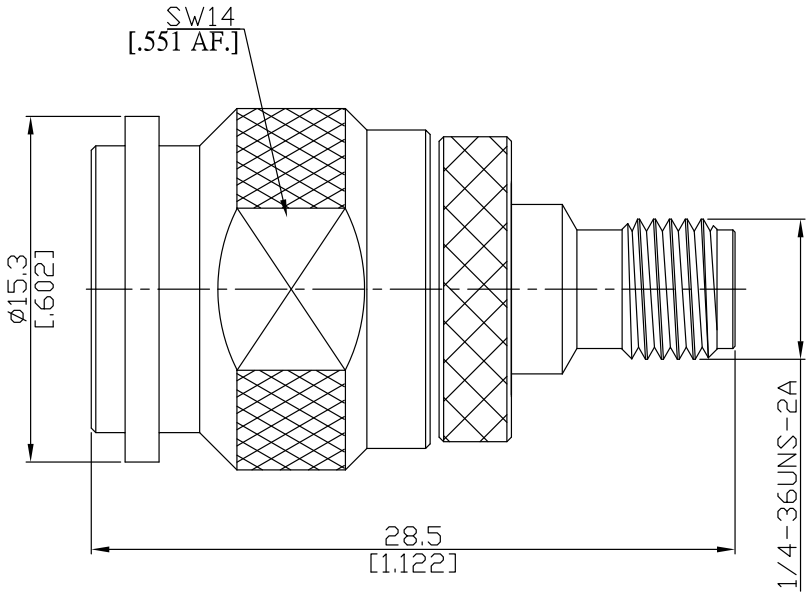
ROSNOL
RF/Microwave Interconnect

Technical Data Sheet

TNC plug (male) / SMA jack (female) Adapter DC-11 GHz VSWR1.2

AD-T1A25A / 933-91



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

Interface

TNC side according to	IEC 60169-26; MIL-STD-348B/313
SMA side according to	IEC 60169-15; MIL-STD-348B/310

Electrical Data

Impedance	50 Ω	
Frequency	DC to 11 GHz	
VSWR (Return Loss)	≤ 1.2 (≥ 20.8 dB)	
Insertion Loss	≤ 0.05 x √F (GHz) dB	
Insulation resistance	≥ 5 GΩ	
Center contact resistance	≤ 3 mΩ, SMA side;	≤ 1.5 mΩ, TNC side
Outer contact resistance	≤ 2 mΩ, SMA side;	≤ 1 mΩ, TNC side
Test voltage	1000 V rms	
Working voltage	480 V rms	
Power handling	≤ 80 W @ 2 GHz	

Material And Plating

Piece Parts (TNC)	Material	Plating
Centre contact	Beryllium Copper	Gold plating, 3 µinch (Non-magnetic nickel-phosphorus underplating, 80 µinch)
Body	Brass	Nickel
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Nickel
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	

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Mechanical Data

	TNC Side	SMA Side
Coupling mechanisms	Screw-lock	Screw-lock
Mating Cycles	min. 500	min. 500
Coupling nut retention	N/A	≥ 270 N
Center contact captivation: axial	≥ 28 N	≥ 27 N
Coupling test torque	max. 1.7 Nm	max. 1.7 Nm
Recommended torque	0.46 Nm to 0.69 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

Single or 100

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