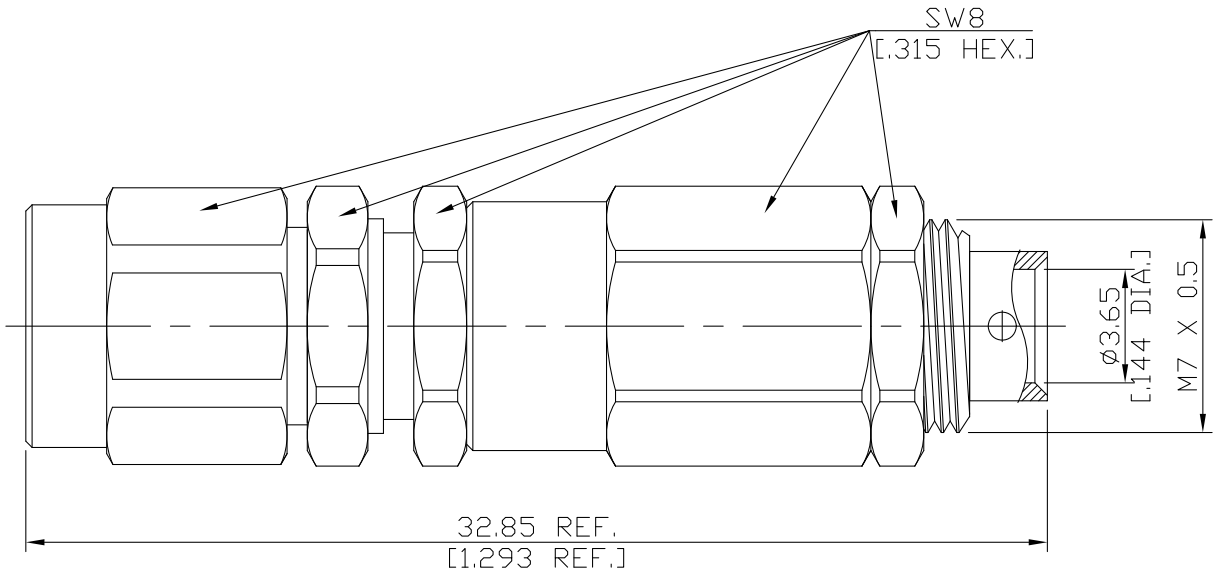
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

Adjustable Phase Trimmer, DC to 18 GHz, with an Adjustable Phase of 3.5 Deg. Per GHz and SMA male Connector for RSF141, RSR141, EF402

SMA1E50-PS141A / 9XX



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

Interface

According to	IEC 60169-15; CECC 22110; MIL-PRF-39012; MIL-STD-348B/310; EN 122110

Electrical Data

Impedance	50 Ω
Frequency	DC to 18 GHz
VSWR (Return Loss)	≤ 1.35 (≥ 16.54 dB)
Insertion Loss	≤ 0.1 x √F (GHz) dB
Insulation Resistance	≥ 5 GΩ
Center Contact Resistance	≤ 3 mΩ
Outer Contact Resistance	≤ 2 mΩ
Test Voltage	1000 V rms
Working Voltage (at sea level)	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
Phase Adjustment Range	3.5 Degree/GHz

-VSWR in application depends decisive on cable assembly process-

Material And Plating

Piece Parts	Material	Plating
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Stainless Steel	Passivated
Insulator	PTFE	
Coupling Nut	Stainless Steel	Passivated
Gasket	Silicone Rubber	

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified

Adjustable Phase Trimmer, DC to 18 GHz, with an Adjustable Phase of 3.5 Deg. Per GHz and SMA male Connector for RSF141, RSR141, EF402

SMA1E50-PS141A / 9XX

Mechanical Data

Coupling mechanisms	Screw-lock
Mating Cycles	min. 500
Centre Contact	Plug-in
Cable Entry	Soldered
Coupling Test Torque	max. 1.7 Nm
Recommended Torque	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

Suitable Cables

RSR-141, RSF-141, RSF-141-FEP, UT 141, RG 402/U, RTK- FS 141, RTK- Flex 402, BELDEN 1673A

Packing

Single or 100

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified