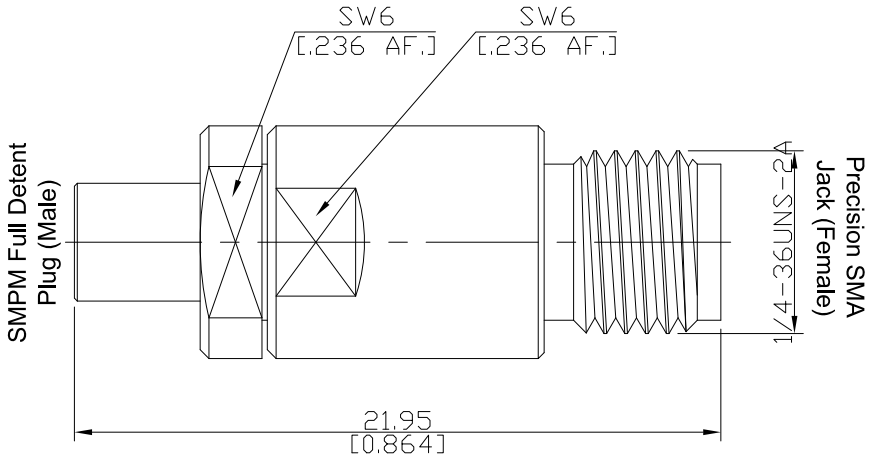
ROSNOL® RF/Microwave Interconnect

Technical Data Sheet

SMPM Full Detent Plug (Male) / Precision SMA Jack(Female) Straight Adapter DC-27 GHz, VSWR ≤ 1.2

AD-PMFD1PCA25A / 9X-9X



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

Interface

SMPM (Full Detent) According to	MIL-PRF-31031; MIL-STD-348B/328
Precision SMA According to	IEC 60169-15; CECC 22110; MIL-PRF-39012; MIL-STD-348B/310; EN 122110

Electrical Data

Impedance	50 Ω	
Frequency	DC to 27 GHz	
VSWR (Return Loss)	≤ 1.2 (> 20.83 dB)	
Insertion Loss	≤ 0.06 x √F (GHz) dB	
Insulation resistance	≥ 5 GΩ	
Center contact resistance	≤ 6.0 mΩ, SMPM side;	≤ 3 mΩ, Precision SMA side
Outer contact resistance	≤ 2.0 mΩ, SMPM side;	≤ 2 mΩ, Precision SMA side
Test voltage	500 V rms	
Working voltage	335 V rms	
Contact Current	1.2A DC max.	

Material And Plating

Piece Parts (SMPM)	Material	Plating
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Stainless Steel	Passivated
Insulator	PTFE	
Piece Parts (Precision SMA)	**Material**	**Plating**
Centre contact	Beryllium Copper	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Stainless Steel	Passivated
Insulator	PTFE	

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

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Mechanical Data

	SMPM side	Precision SMA side
Coupling mechanisms	Snap-on	Screw-lock
Mating cycles	≥ 100	min. 500
Center contact captivation: axial	≥ 27 N	≥ 27 N
Engagement force		
- Full detent	19 N max.	None
Disengagement force		
- Full detent	29 N man.	None
Coupling test torque	N/A	max. 1.7 Nm
Recommended torque	N/A	0.8 Nm to 1.1 Nm

Environmental Data

Temperature Range	-65°C to +165°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition A
Moisture resistance	MIL-STD-202, Method 106
RoHS	compliant

Packing

Single or 100

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