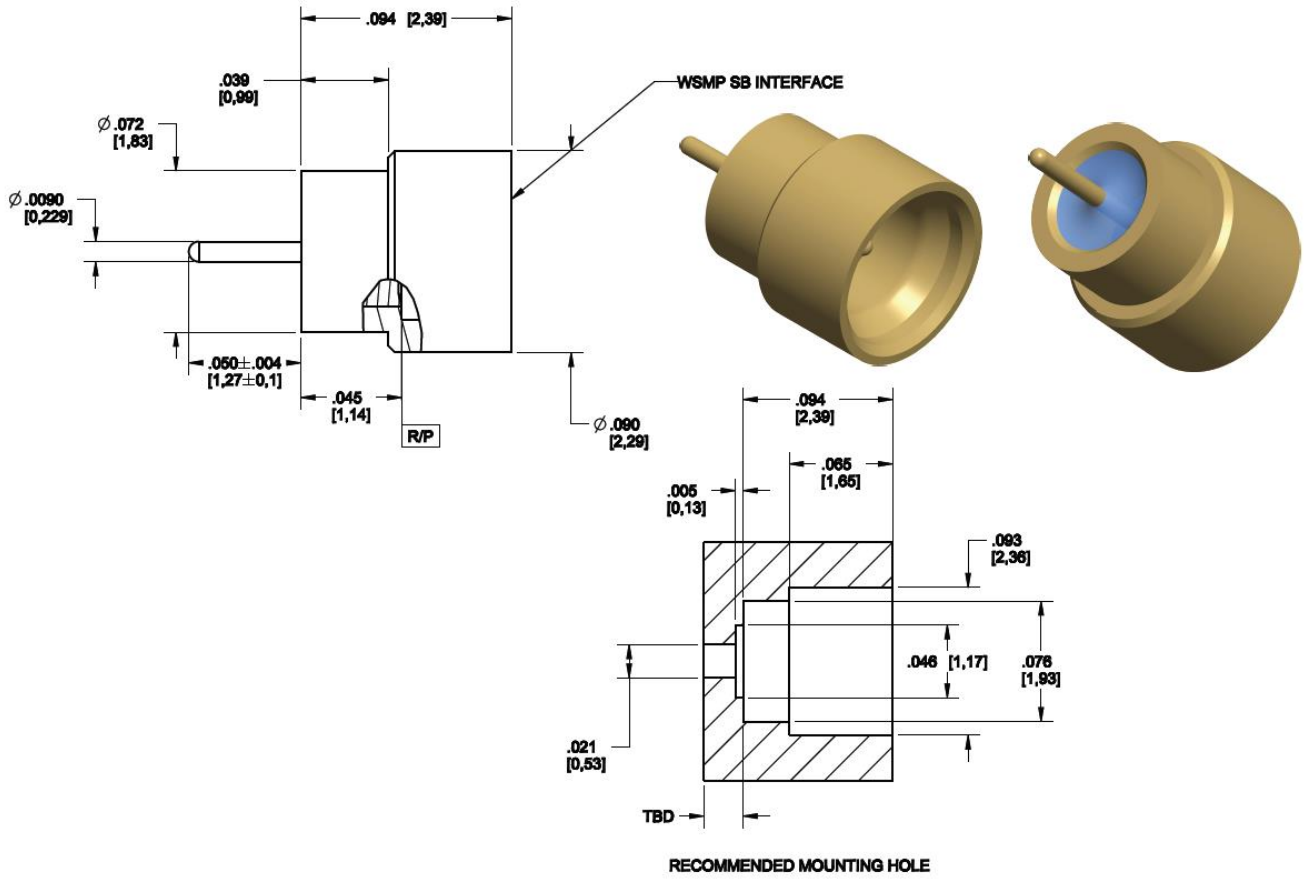
Technical Data Sheet		Rosenberger
WSMP	Male, Smooth Bore, Solder-In Hermetic Shroud	**W1S141-5H0L5**



All dimensions are in inches [mm]
Unless otherwise specified: XXX±.002, XXXX±.0010

Interface

According to	Rosenberger WSMP™ Interface standards

Material and plating

Connector parts	Material	Plating
Body and contact	Kovar® per ASTM F15	Hard gold, 6µIN [0,15µm] min, over Nickel, 50µIN [1,27 µm] min
Dielectric	Corning 7070 Glass	

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Electrical data

Impedance	50 Ω
Frequency	DC to 100 GHz
Return loss (typical)*	≥ 26 dB, DC to 40 GHz ≥ 19 dB, 40 to 50 GHz
Insertion loss	$\leq 0.12 \times \sqrt{f(GHz)}$ dB
Insulation resistance	$\geq 3.5 \times 10^3$ MΩ
Center contact resistance	≤ 6.0 mΩ
Outer contact resistance	≤ 2.0 mΩ
Test voltage (at sea level)	250 V rms
RF High Potential (at sea level)	150 V rms @ 5 MHz

**Connector only, return loss in application depends decisively on PCB layout*

Mechanical data

Mating cycles	
- Smooth Bore	≥ 500
Engagement force (typical)	
- Full Detent	2.5 lb_f [11 N]
Disengagement force (typical)	
- Full Detent	4.5 lb_f [20 N]

Environmental data

Temperature range	-55°C to +165°C
Thermal shock	MIL-STD-202-107, Condition B
Corrosion	MIL-STD-202-101
Vibration	MIL-STD-202-204, Condition D
Shock	MIL-STD-202-213, Condition I
Moisture resistance	MIL-STD-202-106, except Step 7B
Max soldering temperature	IEC 61760-1, +500°F [+260°C] for 10 seconds
Leakage Rate	≤ 1×10^{-8} cc/sec of He @ 1 atm
2002/95/EC (RoHS)	compliant

Tooling

Extraction tool	N/A

Suitable cables

N/A

Packing

Standard

Draft	Date	Approved	Date
P. Sill	3/13/19	J. Havener	3/13/19

Rev.	Engineering change number	Name	Date
a01	Revised per 19-0001	R. Fisher	4/4/19

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