

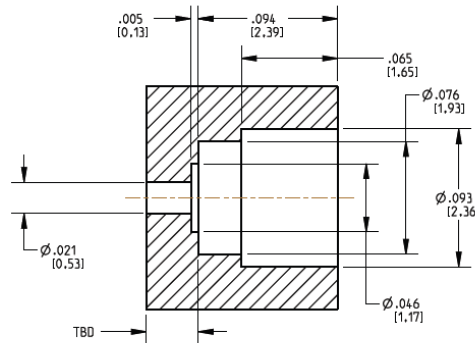
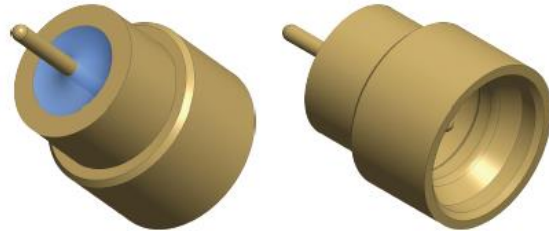
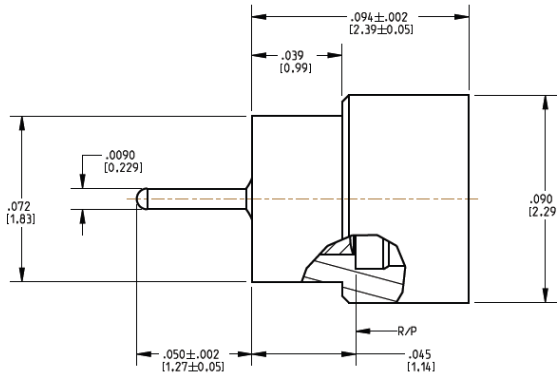
Technical Data Sheet

Rosenberger

WSMP

Male, Full Detent, Solder-In
Hermetic Shroud

W1S101-5H0L5



RECOMMENDED MOUNTING HOLE

All dimensions are in inches [mm]
Unless otherwise specified: XXX±.001, XXXX±.0005

Interface

According to Rosenberger WSMP™ Interface standards

Material and plating

Connector parts

Body and contact

Material

Kovar® per ASTM F15

Plating

Hard gold, 6µIN [0,15µm] min, over Nickel, 50µIN [1,27 µm] min

Dielectric

Corning 7070 Glass

PROPRIETARY AND CONFIDENTIAL
 This data sheet is the property of Rosenberger of North America, LLC. By acceptance of this document you agree that all the rights to drawings, specifications, processes and other data therein, as well as the proprietary and novel features of the subject matter, are reserved by Rosenberger of North America, LLC and are disclosed in confidence. They are not to be manufactured, used, sold or disclosed to others, nor are devices embodying such features or information derived from these disclosures to be used or disclosed, unless and until expressly authorized by Rosenberger of North America, LLC. These drawings, specifications, processes, etc., are and remain the property of Rosenberger of North America, LLC, and are not to be copied or reproduced without permission.

Technical Data Sheet

Rosenberger

WSMP

Male, Full Detent, Solder-In
Hermetic Shroud

W1S101-5H0L5

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	≤ 0.12 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 3.5 x 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	
- Full Detent	≥ 100
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	≤ 1x10 ⁻⁸ cc/sec of He @ 1 atm.
2002/95/EC (RoHS)	compliant

Tooling

Extraction tool	N/A
-----------------	-----

Suitable cables

N/A

Packing

Standard

PROPRIETARY AND CONFIDENTIAL
 This data sheet is the property of Rosenberger of North America, LLC. By acceptance of this document you agree that all the rights to drawings, specifications, processes and other data therein, as well as the proprietary and novel features of the subject matter, are reserved by Rosenberger of North America, LLC and are disclosed in confidence. They are not to be manufactured, used, sold or disclosed to others, nor are devices embodying such features or information derived from these disclosures to be used or disclosed, unless and until expressly authorized by Rosenberger of North America, LLC. These drawings, specifications, processes, etc., are and remain the property of Rosenberger of North America, LLC, and are not to be copied or reproduced without permission.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
R. Fisher	5/30/2018	M. Peeran	5/30/2018	a01	Revised per 19-0001	P. Sill	4/4/19
Rosenberger of North America, LLC P.O. Box 309 Akron, PA USA 17501 www.rosenberger.com				Tel. : +1.717.859.8900 Fax : +1.717.859.7044 Email : info@rosenbergerna.com			Page 2 / 2