

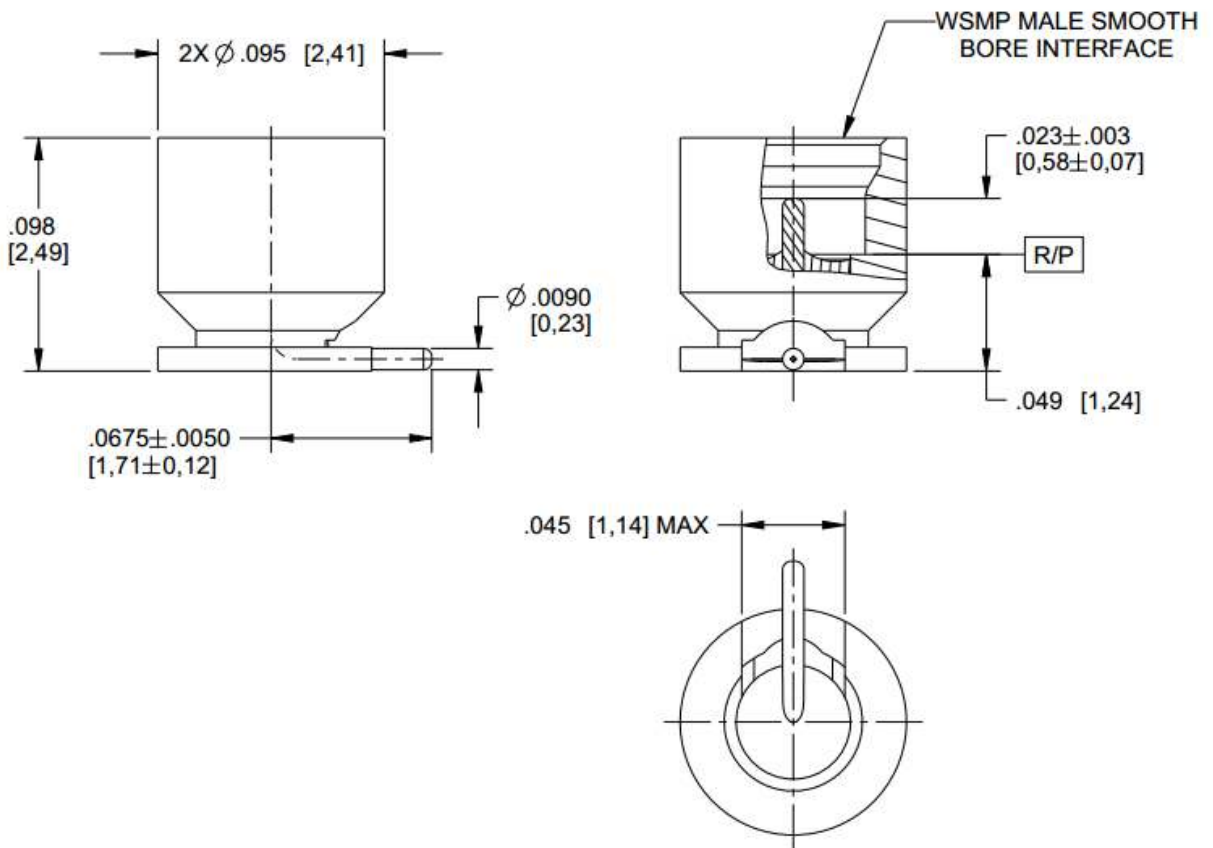
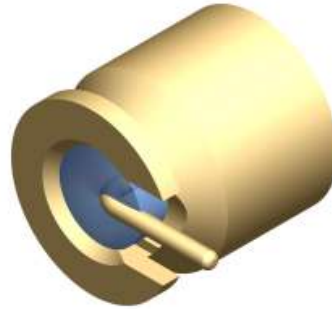
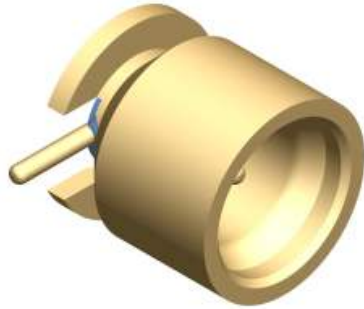
Technical Data Sheet

Rosenberger

WSMP

Male Smooth Bore
Right Angle Launch

W1S143-40ML5



All dimensions are in inches [mm]

Interface

According to

Rosenberger WSMP™ Interface standards

Material and plating

Connector parts

Body and Contact

Material

Kovar® per ASTM F15

Plating

Hard gold $6\mu\text{IN}$ [0,15 μm] min, over Nickel, $80\mu\text{IN}$ [2,0 μm] min

Dielectric

7070 Glass

Technical Data Sheet

Rosenberger

WSMP

Male Smooth Bore
Right Angle Launch

W1S143-40ML5

Electrical data (@ STP unless otherwise specified)

Impedance	50 Ω
Frequency	DC to 65 GHz
Return loss	≥ 26 dB, DC to 26 GHz ≥ 19 dB, 26 to 40 GHz ≥ 14 dB, 40 to 50 GHz
Insertion loss	≤ 0.12 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 3.5 x10 ³ MΩ
Center contact resistance	≤ 2.0 mΩ
Outer contact resistance	≤ 6.0 mΩ
Test voltage	250 V rms
RF High Potential	150 V rms @ 5 MHz
RF-leakage	≥ -80 dB (typical mated pair)

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

Mechanical data

Mating cycles	≥ 500
Smooth Bore	
Engagement force	1.2 lbf [5.3 N]
Smooth Bore	
Disengagement force	1.0 lbf [4.45 N]
Smooth Bore	

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
2002/95/EC (RoHS)	compliant

PROPRIETARY AND CONFIDENTIAL
 This data sheet is the property of Rosenberger North America Akron, 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 North America Akron, 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 North America Akron, LLC. These drawings, specifications, processes, etc., are and remain the property of Rosenberger North America Akron, LLC, and are not to be copied or reproduced without permission.

FR-053
RNA Datasheet2 Rev A
08/01/2022

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
R. Fisher	7/1/16	R. Hosler	7/1/16	a02	Revised per ECN 23-1039	J. Havener	7/6/2023
Rosenberger North America Akron, LLC P.O. Box 309 Akron, PA USA 17501 www.rosenbergerna.com				Tel. : +1.717.859.8900 Fax : +1.717.859.7044 Email : info@rosenbergerna.com			Page 2 / 2