



All dimensions are in inches [mm]
 Unless otherwise specified tolerances are as follows:
 .XXX \pm .001 [0,025]; .XXXX \pm .0005 [0,012]

Interface

According to Rosenberger WSMP™ Interface standards

Material and plating

Connector parts
 Body and Contact
 Dielectric
 Alignment Pin

Material
 KOVAR® per ASTM F15
 Corning 7070 Glass
 SST per ASTM A582

Plating
 Hard Gold, 6 μ N [0,15 μ m] over Nickel
 Passivated

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

Technical Data Sheet

Rosenberger

WSMP

Male, Full Detent, High Frequency, 1 X 4 Port, SMT Shroud

W1S12L-40ML5

Electrical data (@ STP unless otherwise specified)

Impedance	50 Ω
Frequency	DC to 100 GHz
Return loss	≥ 18 dB, DC to 40 GHz ≥ 15 dB, 40 to 70 GHz ≥ 12 dB, 70 to 100 GHz
Insertion loss	≤ 0.12 x √f (GHz) dB
Insulation resistance	≥ 3.5 GΩ
Center contact resistance	≤ 6.0 mΩ
Outer contact resistance	≤ 2.0 mΩ
Test voltage	250 V rms
RF High Potential	150 V rms @ 5 MHz

Mechanical data

Mating cycles	
- Full Detent	≥ 100
Engagement force	
- Full Detent	2.5 lbf [11 N] max
Disengagement force	
- Full Detent	4.5 lbf [20 N] min

Environmental data

Temperature range	-55°C to +165°C
Thermal shock	MIL-STD-202-107, Condition B
Vibration	MIL-STD-202-204, Condition B
Shock	MIL-STD-202-213, Condition A
Moisture resistance	MIL-STD-202-106, except Step 7B
Corrosion	MIL-STD-202-101, Condition B
Max soldering temperature	IEC 61760-1, +500°F [+260°C] for 10 seconds
2002/95/EC (RoHS)	compliant

Documents

Mechanical PCB Layout	MB_W1S15L
-----------------------	-----------

Packing

Standard

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

OSR-730-05
RNA Datasheet2 Rev -
6/26/19

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
D. Fitzkee	07/26/19	B. Moyer	07/26/19	a01	Revised per ECN 20-u187	B. Moyer	07/17/20
Rosenberger North America 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