



All dimensions are in inches [mm]

Unless otherwise specified, tolerances are as follows: .XXX ±.001 [0,025] .XXXX ±.0005 [0,012]

Interface

According to

Rosenberger WSMP™ Interface standards

Material and plating

Connector parts

WSMP (M) and 2.92mm Body

Material

Stainless Steel per
ASTM A582

Plating

Passivated

Contact

CuBe per ASTM B196

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

Dielectric

PTFE per D1710

Dielectric

Ultem® 1000 per ASTM D5205

Technical Data Sheet

Rosenberger

WSMP

Male Full Detent to 2.92mm
Female Test Adapter

W1S102-K00S3

Electrical data

Impedance	50 Ω
Frequency	DC to 40 GHz
Return loss (typical)	≥ 19 dB, DC to 40 GHz
Insertion loss	≤ 0.12 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 3,500 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
RF leakage	≥ -80 dB @ 3 GHz (typical mated pair)

Mechanical data

Mating cycles	
- Full Detent	≥ 100
- Smooth Bore	≥ 500
- Ultra Smooth Bore	≥ 500
Engagement force (typical)	
- Full Detent	2.5 lb _f [11 N]
- Smooth Bore	1.2 lb _f [5.3 N]
- Ultra Smooth Bore	1.0 lb _f [4.5 N]
Disengagement force (typical)	
- Smooth Bore	4.5 lb _f [20 N]
- Smooth Bore	1.0 lb _f [4.5 N]
- Ultra Smooth Bore	1.0 lb _f [4.5 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
2002/95/EC (RoHS)	compliant

Tooling

Extraction tool	N/A
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Suitable cables

N/A

Packing

Standard

Draft	Date	Approved	Date
R. Hosler	8/18/14	M. Peeran	8/18/14

Rev.	Engineering change number	Name	Date
a00	Released per 19-s000	P. Sill	2/6/19

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Page
2 / 2