



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

Dielectric Corning 7070 Glass

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WSMP

Male 2 Port Full Detent SMT
Right Angle Launch

W1S12A-40ML5

Electrical data

Impedance	50 Ω
Frequency	DC to 65 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 x10 ³ MΩ
Center contact resistance	≤ 2.0 mΩ
Outer contact resistance	≤ 6.0 mΩ
Test voltage (at sea level)	250 V rms
RF High Potential (at sea level)	150 V rms @ 5 MHz
RF-leakage	≥ -80 dB (typical mated pair)

*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 lbf [11 N]
Disengagement force (typical)	
- Full Detent	4.5 lbf [20 N]

Environmental data

Temperature range	-55°C to +165°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 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

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RF_35/05.10/6.0

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
J. Havener	2.2.17	-	-	b00	Revised per ECN 21-1238	J. Havener	6/25/2021
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