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All dimensions are in inches [mm]  
 Unless otherwise specified: XXX ±.002 [0,050]

**Interface**

According to Rosenberger WSMP™ Interface standards

**Material and plating**

**Connector parts**  
 Body and contact

**Material**  
 CuBe per ASTM B196

**Plating**  
 Hard gold, 6 µIN [0,15 µm] min, over nickel, 50µIN [1,27 µm] min

Disposable Cap

PTFE per D1710

# Technical Data Sheet

# Rosenberger

**WSMP**

WSMP Straight, FD, PCB Plug,  
Pin/shroud kit

**W1S104-40ML5**

### Electrical data

Impedance	50 Ω
Frequency	DC to 65 GHz
Return loss (typical)*	≥ 26 dB, DC to 26.5 GHz ≥ 19 dB, 26.5 to 65 GHz
Insertion loss	≤ 0.12 x √f(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 (typical mated pair)	≥ -80 dB

\* 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 <sub>f</sub> [11 N]
Disengagement force (typical)	
- Full Detent	4.5 lb <sub>f</sub> [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 2002/95/EC (RoHS)	MIL-STD-202-106, except Step 7B compliant

### Tooling

N/A

### Suitable cables

N/A

### Packing

Standard

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
P. Sill	3/12/19	J. Havener	3/12/19	b00	Released per 19-s000	P. Sill	3/27/19
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