



All dimensions are in inches [mm]
Unless otherwise specified tolerances are as follows:
.XXX±.001 [0,025]

Interface

According to Rosenberger WSMP® Interface standards

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Technical Data Sheet

Rosenberger

WSMP

(F) Connector for
.047 Cable

W1K101-270D3

Material and plating

Connector parts

Body and Contact

Material

CuBe per ASTM B196

Plating

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

Dielectric

PTFE per ASTM D1710

Cable Stop

Ultem® 1000 or equivalent.
per ASTM D6262

Electrical data (@ STP unless otherwise specified)

Impedance (nominal)

50 Ω

Frequency

DC to 100 GHz

Return Loss*

≥ 25 dB, DC to 35 GHz

≥ 19 dB, 35 to 60 GHz

≥ 12 dB, 60 to 100 GHz

Insertion loss

≤ 0.12 dB x √f(GHz), DC to 100 GHz

Insulation resistance

≥ 5 GΩ

Center contact resistance

≤ 6 mΩ

Outer contact resistance

≤ 2 mΩ

Working Voltage

250 V rms

RF leakage

≥ -80 dB (typical mated pair)

*Per HFSS analysis, return loss in application depends on cable type used

Mechanical data

Mating cycles

Full detent

≥ 100

Smooth bore

≥ 500

Engagement force (max)

Full detent

4.0 lbf (17.8 N)

Smooth bore

2.0 lbf (8.9 N)

Disengagement force (min)

Full detent

2.0 lbf (8.9 N)

Smooth bore

0.3 lbf (1.335 N)

Environmental data

Temperature range

-55°C to +155°C

Thermal shock

MIL-STD-202 – 107, Condition B

Corrosion

MIL-STD-202 – 101, Condition C

Vibration

MIL-STD-202 – 204, Condition B

Shock

MIL-STD-202 – 213, Condition A

Moisture resistance

MIL-STD-202 – 106, except Step 7B

Max soldering temperature

IEC 617690-1, 500°F (260 °C) for 10 sec.

2002/95/EC (RoHS)

compliant

Suitable cables

UT047-TP, RTK Flex 047

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

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
J. Havener	6/22/2011	Paul Czikora	6/22/2011	b00	Released per EC 23-1656	R. Hosler	11/27/23
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