

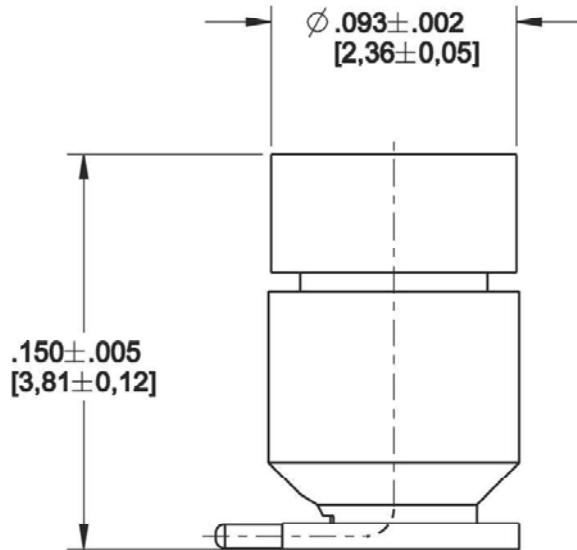
Technical Data Sheet

Rosenberger

WSMP

W1S103-40MD3 with
Pick and Place Plug

W1S109-40MD3



ORIENTATION IS AS SHOWN IN CARRIER REEL

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

Dielectric

Pick and Place Plug

Corning 7070 Glass

PTFE

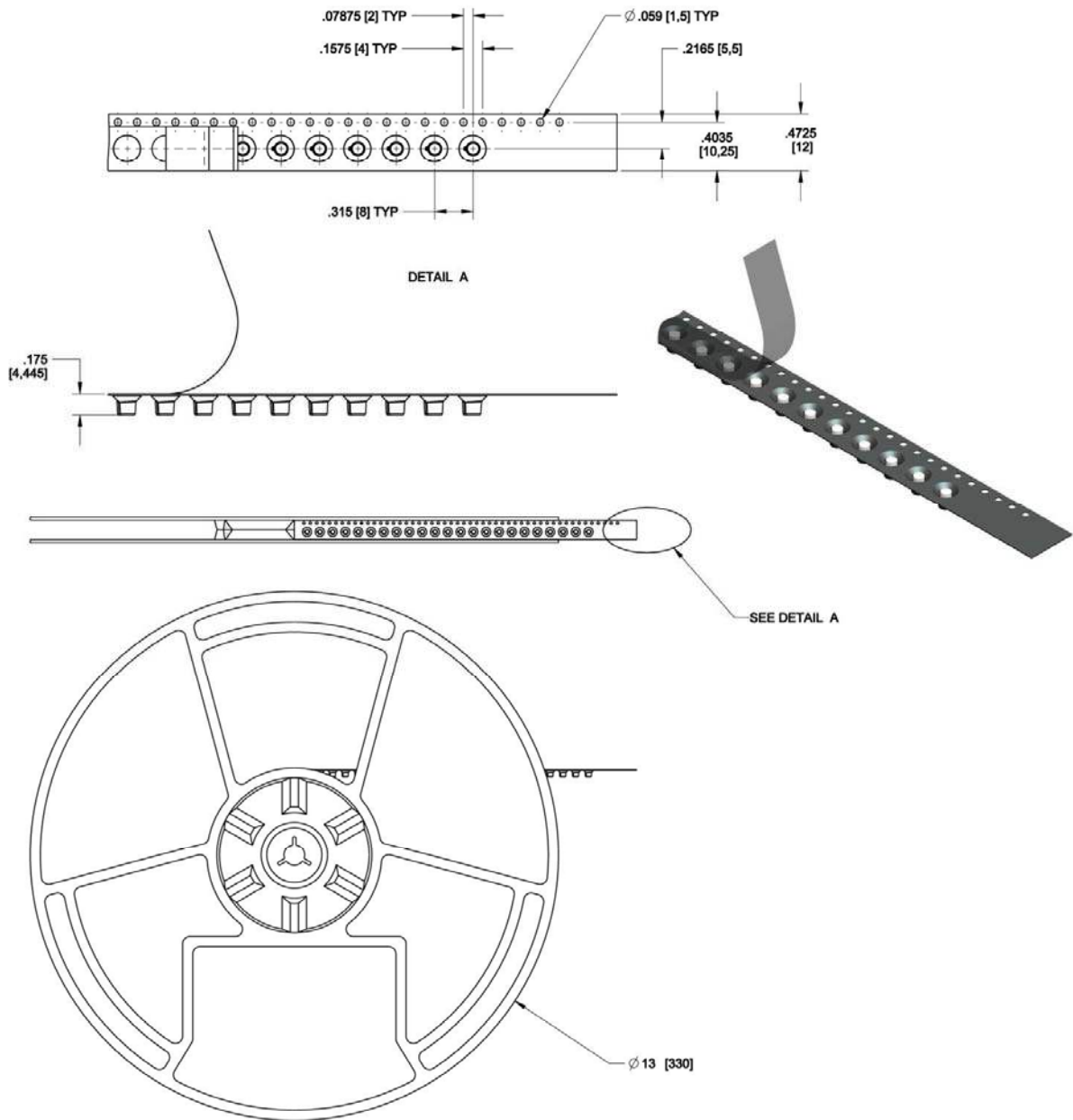
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Electrical data

Impedance	50 Ω
Frequency	DC to 80 GHz
Return loss (typical)*	≥ 26 dB, DC to 40 GHz ≥ 19 dB, 40 to 50 GHz ≥ 14 dB, 50 to 70 GHz
Insertion loss	≤ 0.12 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 3.5 x 10 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	
- Smooth Bore	≥ 500
Engagement force (typical)	
- Smooth Bore	1.2 lb _f [5.3 N]
Disengagement force (typical)	
- Smooth Bore	1.0 lb _f [4.45 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	1500 pcs tape and reel
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RF_35/05.10/6.0

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
R. Hosler	10/21/15	M. Peeran	10/21/15	100	ECN 15-e000; Preliminary	M. Peeran	10/21/15
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