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RF_35/05.10/6.1

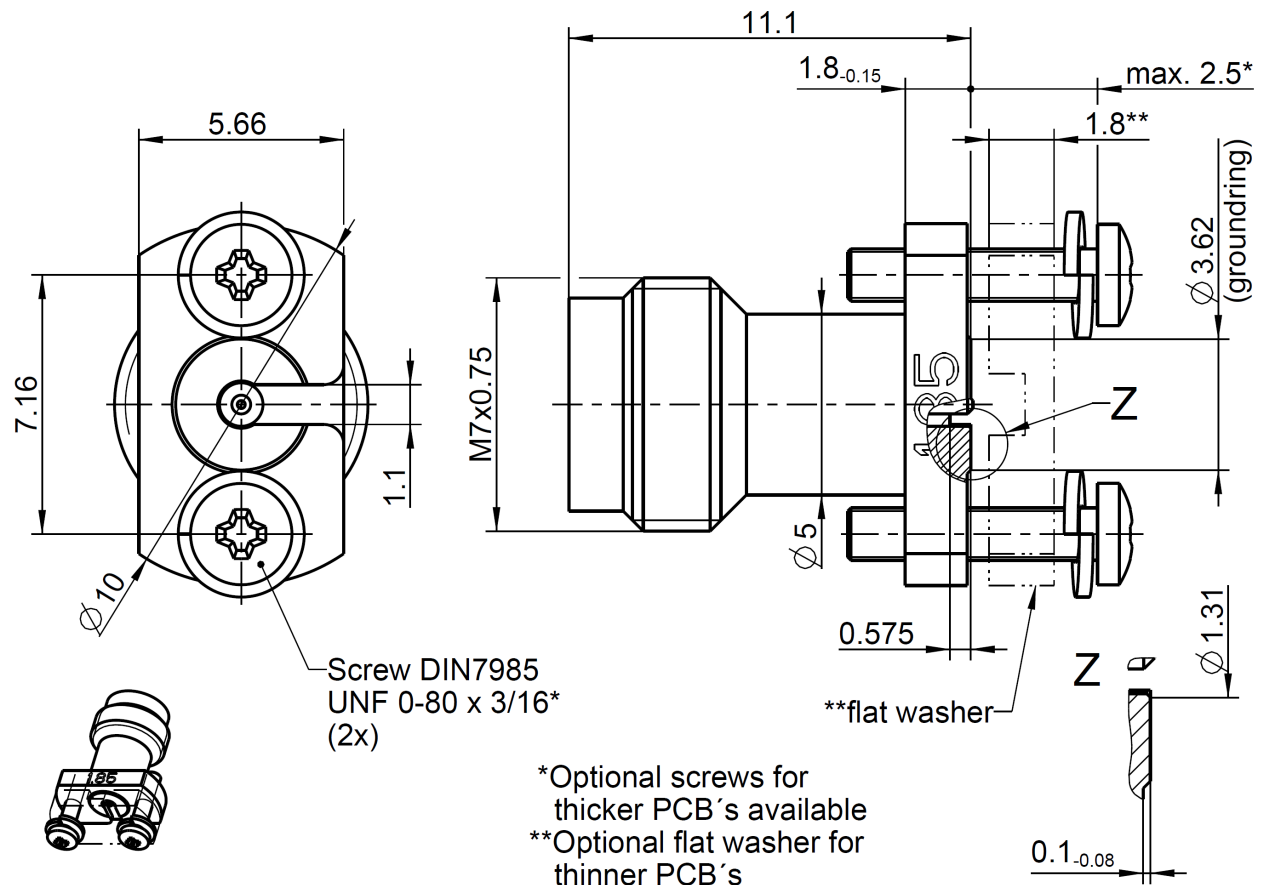
Technical Data Sheet

Rosenberger

RPC-1.85

Straight Jack PCB
Economic Solderless
Connector – for Microstrip

08K722-40MS3



All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to
Mechanically compatible with

IEC 61169-32
RPC-2.40

Documents

PCB layout
Handling instruction

B 594D
HI 039

Material and plating

Connector parts

Center contact
Outer contact
Dielectric

Material

CuBe
Stainless steel
PTFE

Plating

Gold, min. 1.27 μ m, over chemical nickel
Passivated

Technical Data Sheet**Rosenberger****RPC-1.85**
Straight Jack PCB
Economic Solderless
Connector – for Microstrip**08K722-40MS3****Electrical data**

Impedance	50 Ω
Frequency	DC to 70 GHz
Return loss	≥ 21 dB, DC to 26.5 GHz ≥ 15 dB, 26.5 GHz to 40 GHz ≥ 14 dB, 40 GHz to 50 GHz ≥ 10 dB, 50 GHz to 70 GHz
Insertion loss	$\leq 0.05 \times \sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 G Ω
Test voltage	500 V rms
Working voltage	150 V rms
RF-leakage	≥ 100 dB up to 1 GHz
- Return Loss in application depends decisive on PCB layout -	

Mechanical data

Mating cycles Interface	≥ 500
Mating cycles PCB side	≥ 300 typical (at 20°C, sea level, non-permanent duration)
Mating force PCB side	≤ 20 N
Center contact captivation	≥ 27 N
Coupling test torque RPC-1.85	1.65 Nm
Typically torque for the screws	0.15 Nm
Recommended torque RPC-1.85	0.80 Nm to 1.10 Nm

Environmental data

Storage temperature range	-40°C to +85°C
Operating temperature range	-0°C to +85°C
Corrosion	IEC 61169-1, Subclause 9.4.6
Vibration	IEC 61169-1, Subclause 9.3.3
Shock	IEC 61169-1, Subclause 9.3.14
Moisture resistance	IEC 61169-1, Subclause 9.4.3
RoHS	compliant

Accessories

Available Screws DIN 7985-H-A2 UNF 0-80 (cylinder head screw) for different PCB lengths.	
3/16" length = Standard (already included with the connector)	DIN7985-H-A2 UNF 0-80x3/16
1/4" length = Optional (PCB thickness min. 1.2 mm to max. 4.2 mm)	DIN7985-H-A2 UNF 0-80x1/4
5/16" length = Optional (PCB thickness min. 2.8 mm to max. 5.7 mm)	DIN7985-H-A2 UNF 0-80x5/16
3/8" length = Optional (PCB thickness min. 4.4 mm to max. 7.4 mm)	DIN7985-H-A2 UNF 0-80x3/8
7/16" length = Optional (PCB thickness min. 6.0 mm to max. 8.9 mm)	DIN7985-H-A2 UNF 0-80x7/16
Flat Washer = Optional 08K723-40M/60L (recommended screw 1/4" for PCB size min. 0 mm to max. 2.4mm)	

Tooling

N/A

Weight

2.4 g/pce

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
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