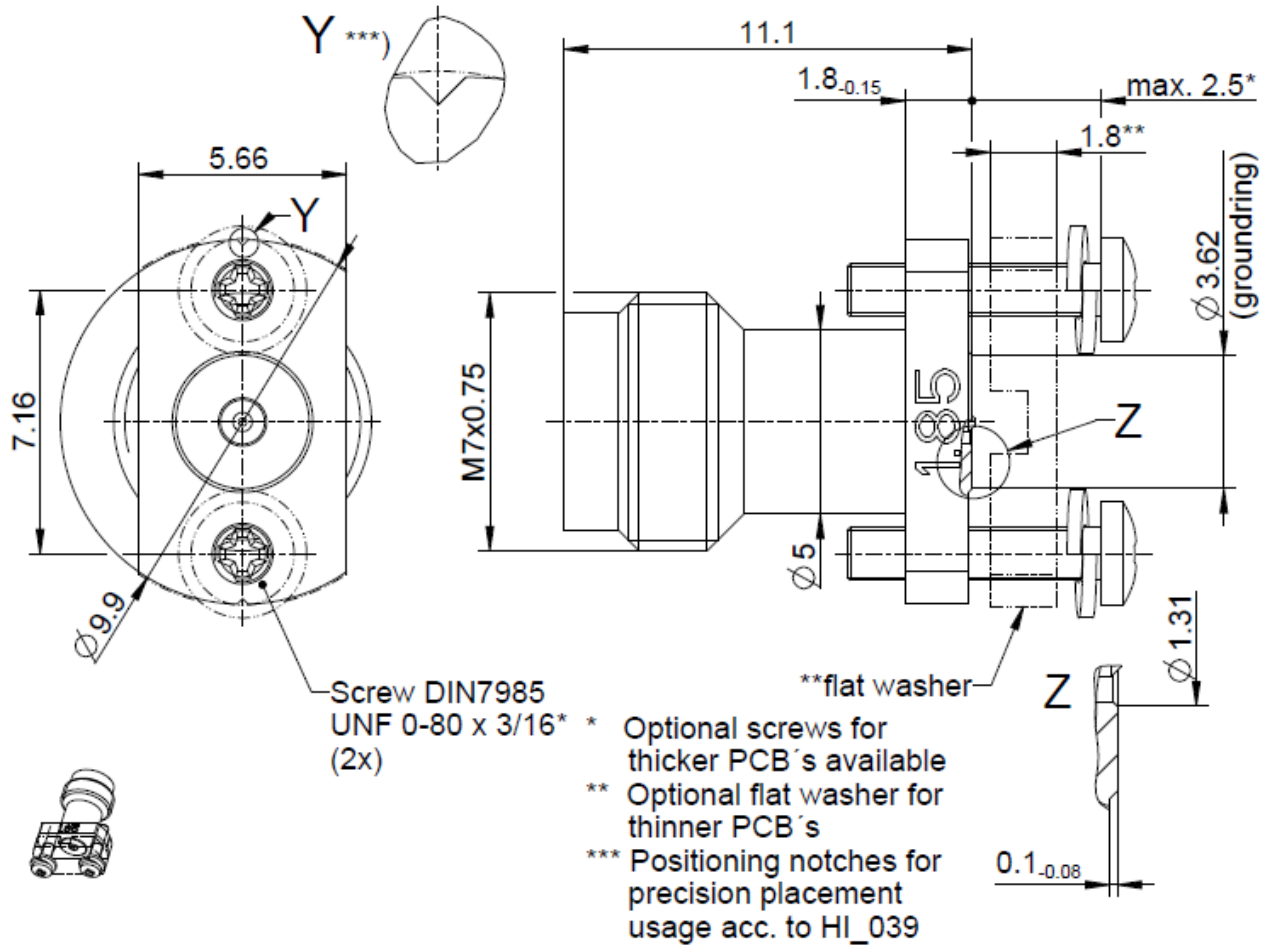


Technical Data Sheet

Rosenberger

RPC-1.85
Straight Jack PCB
Economic Solderless
Connector

08K721-40MS3



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 594C
HI 039

Material and plating

Connector parts

Center contact
Outer contact
Dielectric

Material

CuBe
Stainless steel
PTFE

Plating

Gold, min. 1.27 μm, over chemical nickel
Passivated

RPC-1.85 Straight Jack PCB
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08K721-40MS3

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 ≤ 0.05 x √f(GHz) dB
 Insulation resistance ≥ 5 GΩ
 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.



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