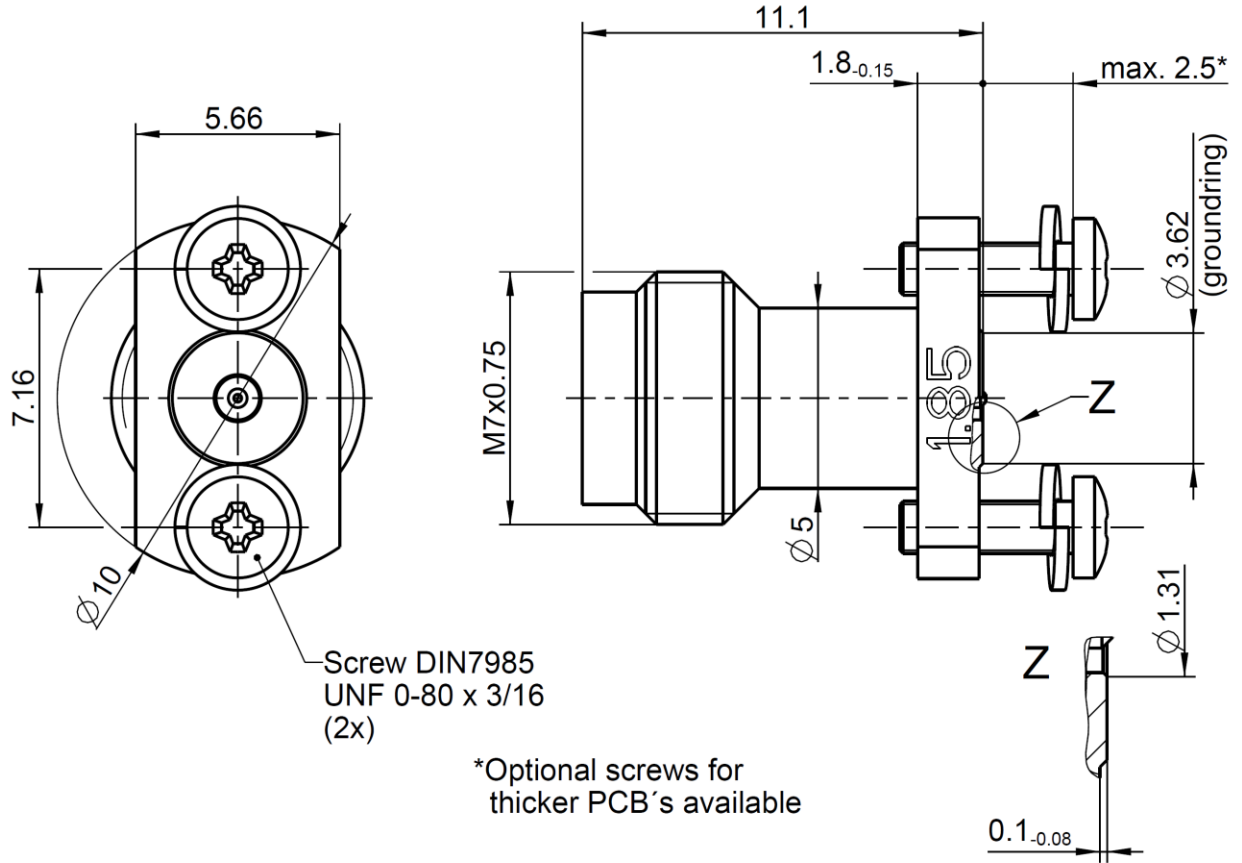


RPC-1.85
Straight Jack PCB
Economic Solderless
Connector

08K721-40MS3



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

Interface

According to IEC 61169-32
Mechanically compatible with RPC-2.40

Documents

PCB layout B 594C

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

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RF_35/05.10/6.1

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
 Center contact resistance ≤ 4.0 mΩ
 Outer contact resistance ≤ 2.5 mΩ
 Test voltage 500 V rms
 Working voltage 150 V rms
 RF-leakage ≥ 100 dB up to 1 GHz
 - VSWR 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
 Thermal shock IEC 61169-1, Subclause 9.4.4
 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

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.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Martin Moder	09.01.17	H. Babinger	26.07.19	b00	19-1289	S. Schmid	23.07.19

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