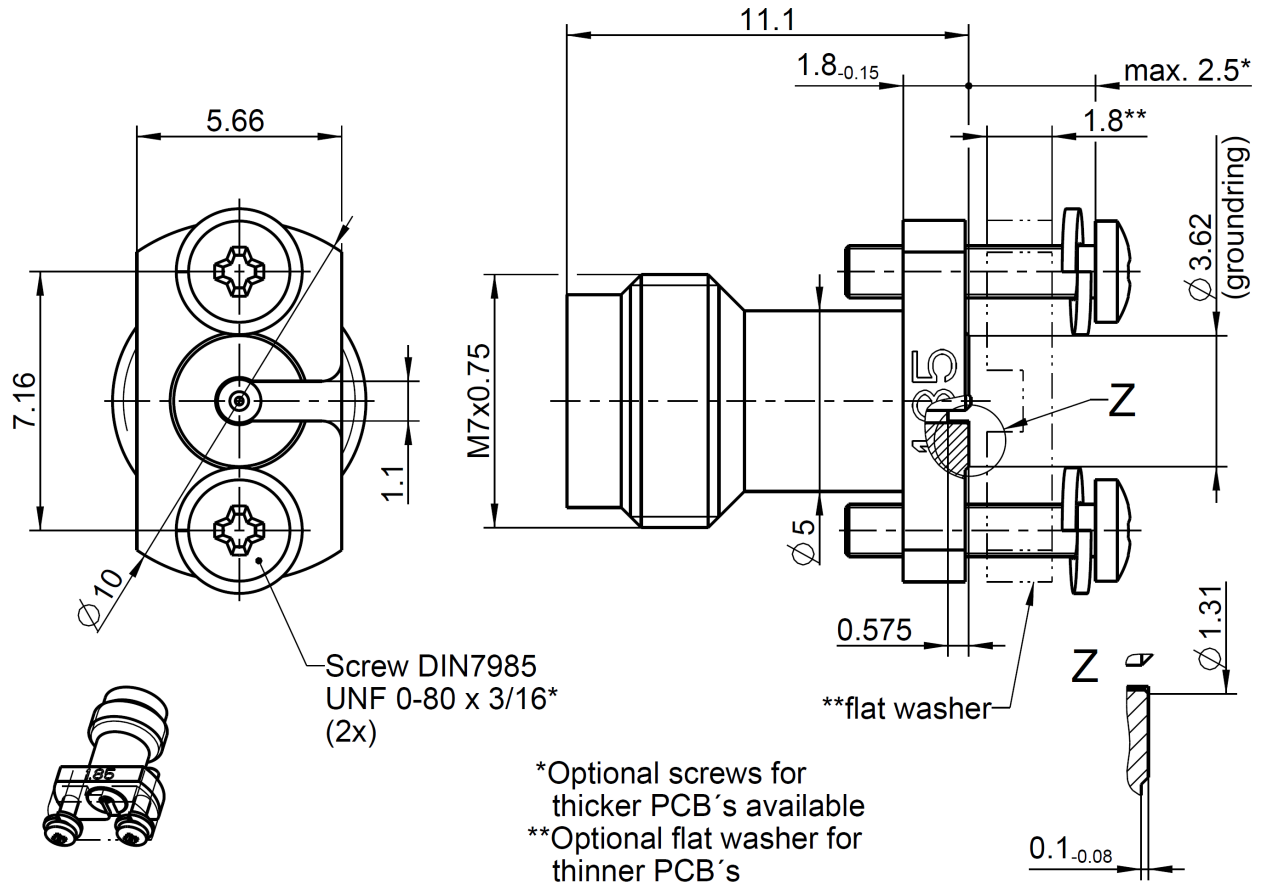


RPC-1.85  
 Straight Jack PCB  
 Economic Solderless  
 Connector – for Microstrip

**08K722-40MS3**



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

**Interface**

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

**Documents**

PCB layout B 594D

**Material and plating**

**Connector parts**

Connector parts	Material	Plating
Center contact	CuBe	Gold, min. 1.27 $\mu$ m, over chemical nickel
Outer contact	Stainless steel	Passivated
Dielectric	PTFE	

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RF\_35/05.10/6.1

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 ≤ 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.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Martin Moder	05.10.18	Herbert Babinger	01.03.21	c00	21-0410	M. Knoll	01.03.21

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