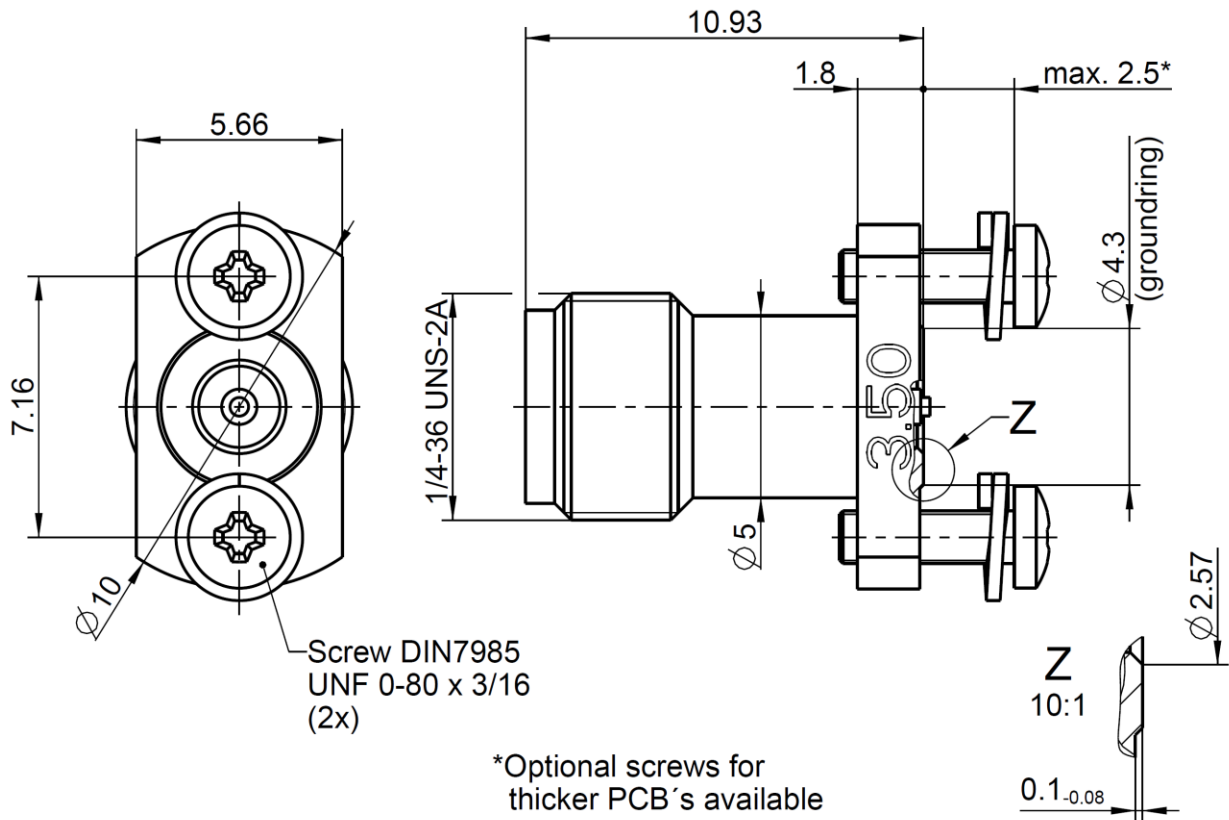


# Technical Data Sheet

# Rosenberger

RPC-3.50  
Straight Jack PCB  
Economic Solderless  
Connector

**03K721-40MS3**



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

## Interface

According to  
Mechanically compatible with

IEC 60169-23  
RPC-2.92 and SMA

## Documents

PCB layout

B 594B

## Material and plating

### Connector parts

Center contact  
Outer contact  
Dielectric

### Material

CuBe  
Stainless steel  
PTFE

### Plating

Gold, min. 1.27  $\mu$ m, over chemical nickel  
Passivated

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RF\_35/05.10/6.1

# Technical Data Sheet

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RPC-3.50  
Straight Jack PCB  
Economic Solderless  
Connector

## 03K721-40MS3

### Electrical data

Impedance	50 Ω
Frequency	DC to 26.5 GHz
Return loss	≥ 26 dB, DC to 26.5 GHz
Insertion loss	≤ 0.03 x √f(GHz) dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 3.0 mΩ
Outer contact resistance	≤ 2.0 mΩ
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	≥ 100 dB up to 1 GHz

- Connector only, VSWR in application depends decisive on PCB layout -

### Mechanical data

Mating cycles	≥ 500
Mating force PCB side	≤ 30 N
Center contact captivation	≥ 27 N
Coupling test torque	1.70 Nm
Recommended torque	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	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106
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

2.1 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
F. Reiner	16.02.16	M. Moder	04.06.18	b00	18-0004	A.Plötz	04.06.18

Rosenberger Hochfrequenztechnik GmbH & Co. KG  
P.O.Box 1260 D-84526 Tittmoning Germany  
[www.rosenberger.de](http://www.rosenberger.de)

Tel. : +49 8684 18-0  
Email : [info@rosenberger.de](mailto:info@rosenberger.de)

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