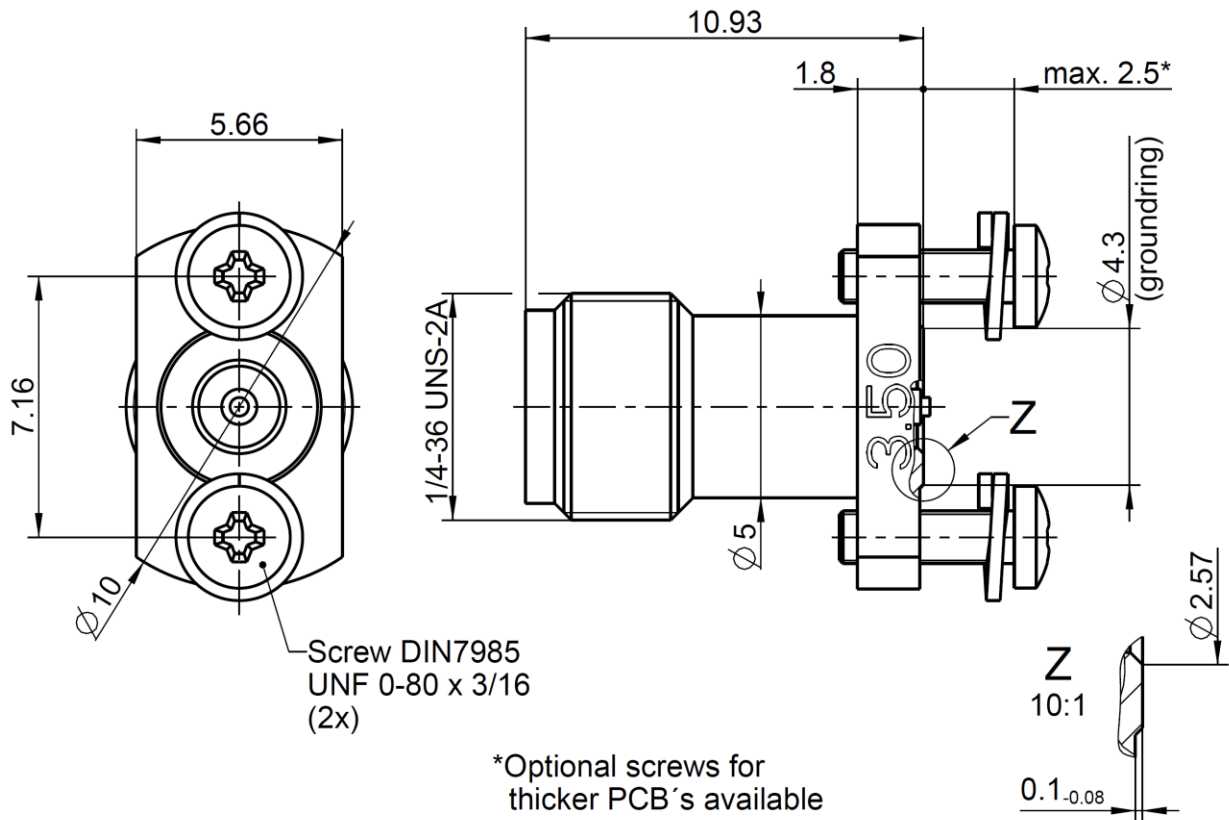


# Technical Data Sheet

# 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 IEC 60169-23  
Mechanically compatible with RPC-2.92 and SMA

### Documents

PCB layout B 594B

### Material and plating

#### Connector parts

Center contact	Material	Plating
Outer contact	CuBe	Gold, min. 1.27 µm, over chemical nickel
Dielectric	Stainless steel	Passivated
	PTFE	

# Technical Data Sheet

# Rosenberger

RPC-3.50  
Straight Jack PCB  
Economic Solderless  
Connector

## 03K721-40MS3

### Electrical data

Impedance	50 $\Omega$
Frequency	DC to 26.5 GHz
Return loss	$\geq 26$ dB, DC to 26.5 GHz
Insertion loss	$\leq 0.03 \times \sqrt{f(\text{GHz})}$ dB
Insulation resistance	$\geq 5$ G $\Omega$
Center contact resistance	$\leq 3.0$ m $\Omega$
Outer contact resistance	$\leq 2.0$ m $\Omega$
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	$\geq 100$ dB up to 1 GHz

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

### Mechanical data

Mating cycles	$\geq 500$
Mating force PCB side	$\leq 30$ N
Center contact captivation	$\geq 27$ 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)

Page  
2 / 2