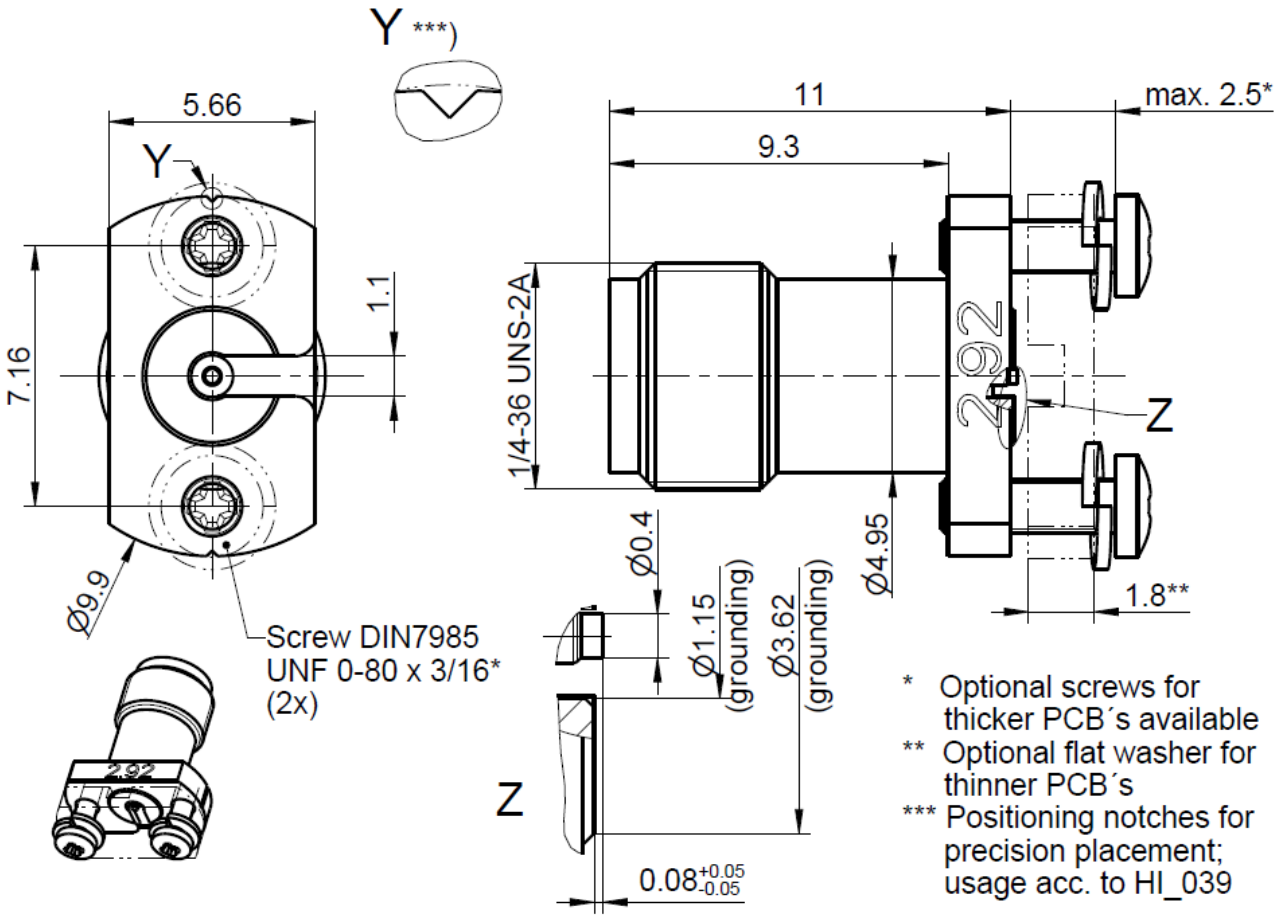
Technical Data Sheet		Rosenberger
RPC-2.92	Straight Jack PCB Economic Solderless Connector	**02K724-40MS3**



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

Interface

According to	IEC 61169-35
Mechanically compatible with	RPC-3.50 and SMA

Documents

PCB layout	LR 23-0018
Handling instruction	HI 039

Material and plating

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

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Technical Data Sheet		Rosenberger
RPC-2.92	Straight Jack PCB Economic Solderless Connector	**02K724-40MS3**

Electrical data

Impedance	50 Ω
Frequency	DC to 43.5 GHz
Return loss	≥ 21 dB, DC to 26.5 GHz ≥ 15 dB, 26.5 GHz to 43.5 GHz
Insertion loss	≤ 0.04 x $\sqrt{f(GHz)}$ dB
Insulation resistance	≥ 5 GΩ
Test voltage	750 V rms
Working voltage	250 V rms
RF-leakage	≥ 100 dB up to 1 GHz

- Connector only, 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	≥ 20 N
Coupling test torque RPC-2.92	1.70 Nm
Typically torque for the screws	0.15 Nm
Recommended torque RPC-2.92	0.80 Nm to 1.10 Nm

Environmental data

Temperature range	-55°C to +125°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

Flat Washer = Optional 08K723-40M/60L (recommended screw 1/4” for PCB size min. 0 mm to max. 2.4mm)

Tooling

N/A

Weight

2.9 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.

Draft	Date	Approved	Date
Martin Moder	17.06.21	H. Babinger	30.11.23

Rev.	Engineering change number	Name	Date
a00	23-s211	Matthias Gehl	30.11.23

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