

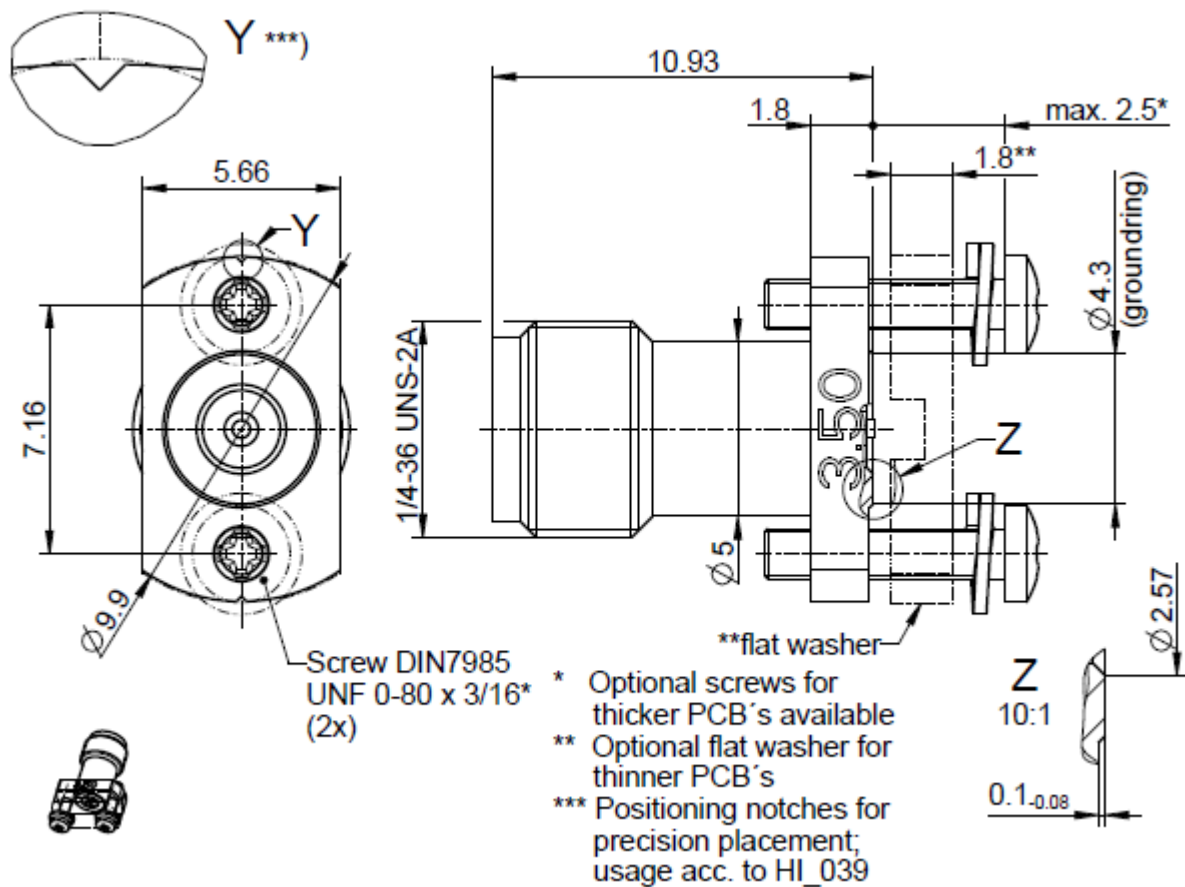
Technical Data Sheet

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
Handling instruction

B 594B
HI 039

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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RPC-3.50		Straight Jack PCB Economic Solderless Connector		03K721-40MS3				
Electrical data								
Impedance		50 Ω						
Frequency		DC to 26.5 GHz						
Return loss		≥ 21 dB, DC to 26.5 GHz						
Insertion loss		≤ 0.03 x √f(GHz) dB						
Insulation resistance		≥ 5 GΩ						
Test voltage		1000 V rms						
Working voltage		335 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-3.50		1.70 Nm						
Typically torque for the screws		0.15 Nm						
Recommended torque RPC-3.50		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		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						
Flat Washer = Optional 08K723-40M/60L (recommended screw 1/4" for PCB size min. 0 mm to max. 2.4mm)								
Tooling								
N/A								
Weight								
2.1 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.								
For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.								
								
Draft		Date	Approved	Date	Rev.	Engineering change number	Name	Date
F. Reiner		16.02.16	M. Moder	11.05.23	h00	23-0653	S. Barth	11.05.23
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