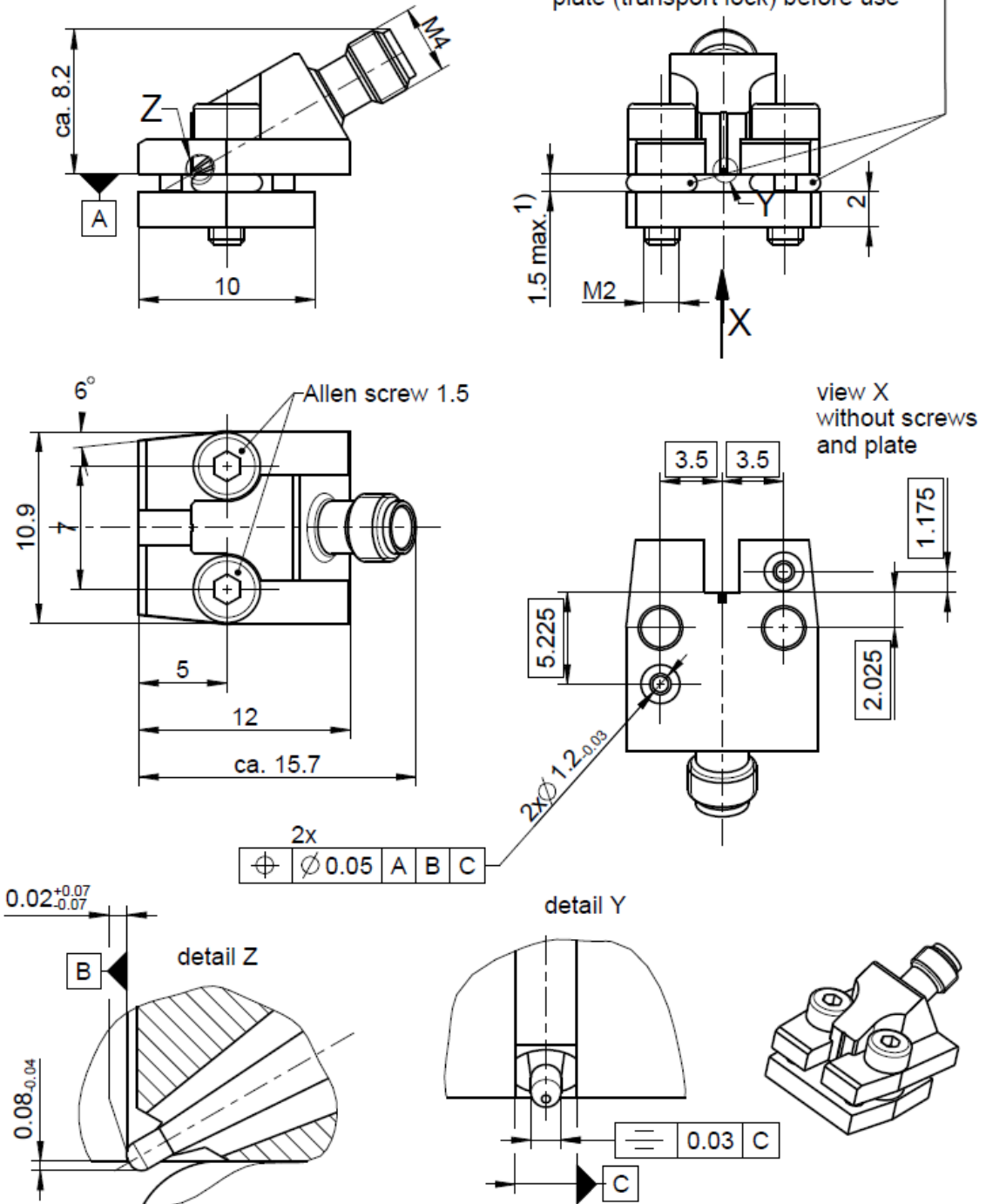


Remove O-Rings between body and plate (transport lock) before use



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

Interface

According to IEC 61169-31

Documents

PCB layout MB 389
 Handling Instruction HI_016

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/05:10/6.0

Technical Data Sheet

Rosenberger

RPC-1.00

SMD Connector jack

01K80A-40ML5

Material and plating

Connector parts

Center contact
Outer contact PCB side
Outer contact RPC-1.00 side
Dielectric

Material

CuBe
CuBe or equiv.
CuBe or equiv.
PEEK

Plating

AuroDur®, gold plated
AuroDur®, gold plated
AuroDur®, gold plated

Electrical data

Impedance 50 Ω
Frequency DC to 110 GHz
Return loss
≥ 21 dB, DC to 26.5 GHz
≥ 19 dB, 26.5 GHz to 40 GHz
≥ 17 dB, 40 GHz to 70 GHz
≥ 12 dB, 70 GHz to 100 GHz
≥ 10 dB, 100 GHz to 110 GHz
Insertion loss ≤ 0.05 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance ≥ 5 GΩ
Test voltage 500 V rms
Working voltage 150 V rms

- Return loss in application depends decisive on PCB layout -

Mechanical data

Mating cycles PCB side ≥ 300
Mating cycles RPC-1.00 side ≥ 500
Center contact captivation ≥ 10 N
Coupling test torque RPC-1.00 0.70 Nm
Recommended torque RPC-1.00 0.30 Nm to 0.41 Nm
Recommended torque Allen screw 1.5 0.20 Nm to 0.30 Nm
PCB thickness max.¹ 1.5 mm typical; dimension expandable with longer screws

Environmental data

Temperature range -40°C to +85°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
Max. soldering temperature N/A (connector is only screwed on, not soldered)
RoHS compliant

Tooling

Allen wrench 1.5 mm

Packing

Standard 1 pce in box
25 pcs in blister
Weight 5.3 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
Herbert Babinger	28.06.12	Florian Reiner	28.03.22	h00	22-0477	A. Youmsi	28.03.22
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de				Tel. : +49 8684 18-0 Fax : +49 8684 18-499 Email : info@rosenberger.de			Page 2 / 2