



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

**Interface**

According to  
Mechanically compatible with

IEC 61169-35  
RPC-3.50 and SMA

**Documents**

PCB layout  
Handling Instruction

MB 425  
HI\_016

# Technical Data Sheet

# Rosenberger

RPC-2.92

SMD Connector jack

02K80F-40ML5

## Material and plating

### Connector parts

Center contact  
Outer contact PCB side  
Outer contact RPC-2.92 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 40 GHz  
Return loss ≥ 21 dB, DC to 26.5 GHz  
≥ 19 dB, 26.5 GHz to 40 GHz  
Insertion loss ≤ 0.04 x √f(GHz) dB  
Insulation resistance ≥ 5 GΩ  
Test voltage 750 V rms  
Working voltage 250 V rms

- Return loss in application depends decisive on PCB layout -

## Mechanical data

Mating cycles PCB side ≥ 300  
Mating cycles RPC-2.92 side ≥ 500  
Center contact captivation ≥ 20 N  
Coupling test torque RPC-2.92 1.70 Nm  
Recommended torque RPC-2.92 0.80 Nm to 1.10 Nm  
Recommended torque Allen screw 1.5 0.20 Nm to 0.30 Nm  
PCB thickness max.<sup>1</sup> 1.5 mm typical; dimension expandable with longer screws

## Environmental data

Temperature range -40°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  
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  
50 pcs in blister  
Weight 6.7 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.

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