



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

Interface

According to IEC 61169-65

Documents

PCB layout LR_23-0035
Handling Instruction HI_016

intern | internal

RPC-1.35 SMD Connector jack

P9K80A-40ML5

Material and plating

Connector parts

Center contact
Outer contact PCB side
Outer contact RPC-1.35 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 90 GHz
Return loss ≥ 21 dB, DC to 26.5 GHz
≥ 17 dB, 26.5 GHz to 40 GHz
≥ 14 dB, 40 GHz to 60 GHz
≥ 12 dB, 60 GHz to 90 GHz
Insertion loss ≤ 0.05 x √f(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-1.35 side ≥ 3000
Center contact captivation ≥ 10 N
Coupling test torque RPC-1.35 1.65 Nm
Recommended torque RPC-1.35 0.90 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
Corrosion IEC 61169-1, Subclause 9.4.6
Vibration IEC 61169-1, Subclause 9.3.3
Shock IEC 61169-1, Subclause 9.3.14
Max. soldering temperature N/A (connector is only screwed on, not soldered)
RoHS compliant

Tooling

Allen wrench 1.5 mm

Weight

3.2 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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Martin Moder	25.08.17	Florian Reiner	06.06.23

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a00	23-s107	S. Barth	06.06.23

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