



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

**Interface**

RPC-1.85 according to  
RPC-1.85 mechanically compatible with  
Mini-SMP according to

IEC 61169-32  
RPC-2.40  
MIL-STD-348  
Mateable with GPPO™ (Gilbert Engineering Co., Inc.)  
and SSMP™ (Connectors Devices, Inc.)

**Documents**

N/A

**Material and plating**

**Connector parts**

Center contact  
Outer contact RPC-1.85  
Outer contact Mini-SMP  
Dielectric

**Material**

CuBe  
Stainless steel  
CuBe  
PEEK

**Plating**

Gold, min. 1.27 µm, over chemical nickel  
Passivated  
Gold, min. 0.8 µm, over chemical nickel

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RF\_35/09;14/6.2

Adaptor  
RPC-1.85 jack – Mini-SMP jack

**08K118-K00S3**

**Electrical data**

Impedance 50 Ω  
 Frequency DC to 65 GHz  
 Return loss ≥ 30 dB, DC to 12 GHz  
 ≥ 18 dB, 12 GHz to 50 GHz  
 ≥ 15 dB, 50 GHz to 65 GHz  
 Insertion loss ≤ 0.05 x √f(GHz) dB  
 Insulation resistance ≥ 5 GΩ  
 Test voltage (at sea level) 500 V rms  
 Working voltage (at sea level) 150 V rms

**Mechanical data**

Mating cycles RPC-1.85 ≥ 500  
 Mating cycles Mini-SMP  
 if mating part is Smooth bore ≥ 500  
 if mating part is Full detent ≥ 100  
 Center contact captivation ≥ 20 N  
 Coupling test torque RPC-1.85 1.65 Nm  
 Recommended torque RPC-1.85 0.80 Nm to 1.10 Nm  
 Engagement force Mini-SMP  
 - Smooth bore 11 N typical  
 - Full detent 19 N typical  
 Disengagement force Mini-SMP  
 - Smooth bore 11 N typical  
 - Full detent 29 N typical

**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  
 RoHS compliant

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

5.5 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	05.01.05	F. Reiner	20.06.18	b01	18.1026	M.Ruf	20.06.18

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