



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-348A, Fig. 328
Mateable with GPPO™ (Gilbert Engineering Co., Inc.)
and SSMP™ (Connectors Devices, Inc.)

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact
Coupling nut RPC-1.85
Dielectric

Material

Beryllium copper
Stainless steel
Stainless steel
PEEK

Plating

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

**ADAPTOR
RPC-1.85 PLUG – MINI-SMP PLUG**

08S118-S00S3

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 |
| Center contact resistance RPC-1.85 | ≤ 4.0 mΩ |
| Outer contact resistance RPC-1.85 | ≤ 2.5 mΩ |
| Center contact resistance MINI-SMP | ≤ 6.0 mΩ |
| Outer contact resistance MINI-SMP | ≤ 2.0 mΩ |
| Test voltage | 500 V rms |
| Working voltage | 150 V rms |

Mechanical data

| | |
|-------------------------------|--------------------|
| Mating cycles RPC-1.85 | ≥ 500 |
| Mating cycles MINI-SMP | |
| - 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 | |
| - full detent | 19 N max. |
| Disengagement force MINI-SMP | |
| - full detent | 29 N max. |

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 |
| 2002/95/EC (RoHS) | compliant |

Tooling

N/A

Suitable cables

N/A

Packing

| | |
|----------|--------------|
| Standard | 1 pce in box |
| Weight | 6.5 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 | Krautenbacher J. | 19/10/06 | b00 | 06-0478 | B. Dandl | 19/10/06 |
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