



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

**Interface**

According to

MIL-STD-348

Mateable with GPPO™ (Gilbert Engineering Co., Inc.)  
and SSMP™ (Connectors Devices, Inc.)

**Documents**

PCB layout  
Tape & reel packaging

B 209  
VG45.1M501

**Material and plating**

**Connector parts**

Center contact  
Outer contact  
Dielectric

**Material**

CuBe  
Brass  
PEEK

**Plating**

AuroDur®, gold plated  
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RF\_35/09.14/6.2

**Electrical data**

|                                |  |
|--------------------------------|--|
| Impedance                      | 50 Ω   |
| Frequency                      | DC to 65 GHz   |
| Return loss                    | ≥ 19 dB, DC to 26.5 GHz<br>≥ 13 dB, 26.5 to 40 GHz<br>≥ 9 dB, 40 to 65 GHz |
| Insertion loss                 | ≤ 0.05 x √f(GHz) dB  |
| Insulation resistance          | ≥ 5 GΩ   |
| Center contact resistance      | ≤ 6.0 mΩ   |
| Outer contact resistance       | ≤ 2.0 mΩ   |
| Working voltage (at sea level) | 325 V rms  |
| (at 70000 feet)                | 125 V rms  |

- VSWR in application depends decisive on PCB layout -

**Mechanical data**

|                            |              |
|----------------------------|--------------|
| Mating cycles              | ≥ 100        |
| Center contact captivation | ≥ 5 N        |
| Engagement force           |              |
| - smooth bore              | 11 N typical |
| Disengagement force        |              |
| - smooth bore              | 11 N typical |

**Environmental data**

|                            |                                      |
|----------------------------|--------------------------------------|
| Temperature range          | -55°C to +155°C                      |
| Thermal shock              | MIL-STD-202, Method 107, Condition B |
| Vibration                  | MIL-STD-202, Method 204, Condition A |
| Shock                      | MIL-STD-202, Method 213, Condition A |
| Moisture resistance        | MIL-STD-202, Method 106              |
| Climatic Category          | IEC 60068 55/155/21                  |
| Max. soldering temperature | IEC 61760-1, +260°C for 10 sec.      |
| RoHS                       | compliant                            |

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

|        |           |
|--------|-----------|
| Weight | 0.3 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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



|                  |          |             |          |      |                           |                |          |
|------------------|----------|-------------|----------|------|---------------------------|----------------|----------|
| Draft            | Date     | Approved    | Date     | Rev. | Engineering change number | Name           | Date     |
| Chr. Entsfellner | 27.06.06 | Chr. Janßen | 21.10.20 | e00  | 20-1927                   | S. Huber-Siegl | 21.10.20 |