



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

**Interface**

According to IEC 60169-16, MIL-PRF-39012, CECC 22210

**Documents**

N/A

**Material and plating**

**Connector parts**

- Center contact
- Outer contact
- Body
- Coupling nut
- Dielectric
- Substrate

**Material**

- Brass
- Brass
- Brass
- Brass
- PTFE / PPE
- Al<sub>2</sub>O<sub>3</sub>

**Plating**

- Gold, min. 1.27 µm, over nickel
- Flash white bronze over silver(e.g. Optargen®)
- Nickel, 2.5-5 µm
- White bronze(e.g. Optalloy®)

RF\_35/08.06/4.0

**Electrical data**

Impedance 50 Ω  
 Frequency DC to 6 GHz  
 Center contact resistance ≤ 1 mΩ  
 Outer contact resistance ≤ 0.25 mΩ

**Open**

Return loss  $S_{11} \leq 0.1 \text{ dB to } 6 \text{ GHz}$   
 Fringing capacitance  $C_0 = 2.68551 \times 10^{-15} \text{ F}$   
 $C_1 = 46.1588 \times 10^{-27} \text{ F/Hz}$   
 $C_2 = 668.508 \times 10^{-36} \text{ F/Hz}^2$   
 $C_3 = -113.007 \times 10^{-45} \text{ F/Hz}^3$   
 Resulting phase uncertainty  $\arg(S_{11}) \leq 3.0^\circ \text{ to } 6 \text{ GHz}$   
 Offset length 20.32 mm ± 0.05 mm

**Short**

Return loss  $S_{11} \leq 0.1 \text{ dB to } 6 \text{ GHz}$   
 Normal phase at short plane  $\phi = 180^\circ$   
 Resulting phase uncertainty  $\arg(S_{11}) \leq 2.0^\circ \text{ to } 6 \text{ GHz}$   
 Offset length 20.32 mm ± 0.05 mm

**Load**

Return loss  $S_{11} \geq 42 \text{ dB to } 2.5 \text{ GHz}$   
 $S_{11} \geq 38 \text{ dB, } 2.5 \text{ GHz to } 6 \text{ GHz}$   
 DC-Resistance  $R = 50 \Omega \pm 0.5 \Omega$   
 Power handling  $P_{\max} = 1.0 \text{ W (0}^\circ\text{C to } 50^\circ\text{C)}$

**Mechanical data**

Mating cycles min. 500  
 Coupling nut retention ≥ 450 N  
 Center contact captivation ≥ 28 N  
 Coupling test torque max. 1.7 Nm  
 Recommended torque 0.7 Nm to 1.1 Nm  
 Gauge 5.33 mm – 5.84 mm

**Environmental data**

Temperature range -40°C to +85°C  
 2002/95/EC (RoHS) compliant

**Packing**

Standard 1 pce in air cushion bag  
 Weight 127.1 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
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