



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**

Application note

AN001 "Calibration Services"

**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Dielectric  
Substrate

**Material**

CuBe  
CuBe  
PEEK  
Al<sub>2</sub>O<sub>3</sub>

**Plating**

Gold, min. 1.27 µm, over nickel  
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**Electrical data**

Frequency range	DC to 40 GHz
Return loss	≥ 36 dB, DC to 4 GHz ≥ 28 dB, 4 GHz to 18 GHz ≥ 23 dB, 18 GHz to 26.5 GHz ≥ 20 dB, 26.5 GHz to 40 GHz
DC Resistance	50 Ω ± 0.5 Ω
Power handling	≤ 0.5 W

**Mechanical data**

Mating cycles	
if mating part is Smooth bore	≥ 500
if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore	11 N typical
- Full detent	19 N typical
Disengagement force	
- Smooth bore	11 N typical
- Full detent	29 N typical
Gauge	0.00 mm to 0.08 mm

**General standard definition**

For proper operation the vector network analyzer (VNA) needs a model describing the electrical behaviour of this calibration standard. The different models, units, and terms used will depend on the VNA type and they will have to be entered into the VNA. All values are based on typical geometry and plating.

Offset $Z_o$ / Impedance / $Z_o$	50 Ω
Offset Delay	0.0000 ps
Length (electrical) / Offset Length	0.00 mm
Offset Loss	0.00 GΩ/s
Loss	0.0000 dB/√GHz

**Environmental data**

Operating temperature range <sup>1</sup>	+20 °C to +26 °C
Rated temperature range of use <sup>2</sup>	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C

RoHS compliant

<sup>1</sup> Temperature range over which these specification are valid.

<sup>2</sup> This range is underneath and above the operating temperature range, within the calibration load is fully functional and could be used without damage.