

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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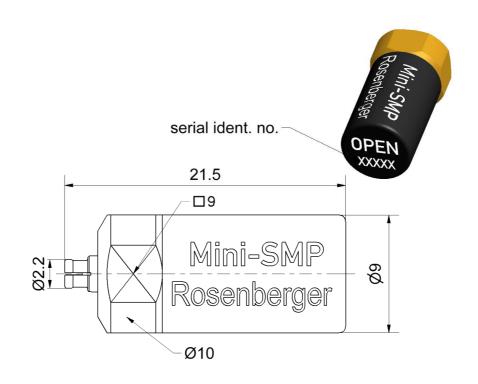
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Technical Data Sheet		Rosenberger		
Mini-SMP	Open Circuit Jack	18K12L-000D3		



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

#### Interface

According to

MIL-STD-348
Mateable with GPPO<sup>TM</sup> (Gilbert Engineering Co., Inc.) and SSMP<sup>TM</sup> (Connectors Devices, Inc.)

#### **Documents**

Application note

AN001 "Calibration Services"

# Material and plating Connector parts

Center conductor
Outer conductor
Dielectric

Material CuBe CuBe

**PEEK** 

Plating Gold, min. 1.27  $\mu$ m, over nickel Gold, min. 1.27  $\mu$ m, over nickel

Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de

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# R 35/09.14/6.2

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### Electrical data

Frequency range DC to 40 GHz

Return loss  $\leq$  0.40 dB, DC to 18 GHz

≤ 0.50 dB, 18 GHz to 40 GHz

Error from nominal phase<sup>1</sup>  $\leq 5.0^{\circ}$ , DC to 18 GHz

≤ 10.0°, 18 GHz to 40 GHz

#### Mechanical data

Mating cycles

if mating part is Smooth bore  $\geq 500$  if mating part is Full detent  $\geq 100$ 

Engagement force

- Smooth bore 11 N typical - Full detent 19 N typical

Disengagement force

Smooth boreFull detent11 N typical29 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.

 $\begin{array}{lll} \mbox{Offset $Z_{\rm o}$ / Impedance / $Z_{\rm o}$} & 50 \ \Omega \\ \mbox{Offset Delay} & 17.5121 \ ps \\ \mbox{Length (electrical) / Offset Length} & 5.25 \ mm \\ \mbox{Offset Loss} & 3.75 \ G\Omega/s \\ \mbox{Loss} & 0.0114 \ dB/\sqrt{\rm GHz} \end{array}$ 

Fringing Capacitances<sup>2</sup>

#### Environmental data

Operating temperature range<sup>3</sup> +20 °C to +26 °C Rated temperature range of use<sup>4</sup> 0 °C to +50 °C Storage temperature range -40 °C to +85 °C

RoHS compliant

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<sup>&</sup>lt;sup>1</sup> The nominal phase is defined by the Offset Delay, the Offset Loss and the Fringing Capacitances

<sup>&</sup>lt;sup>2</sup> Fringing Capacitances are determined individually for each open circuit and are documented in a Calibration Certificate.

<sup>&</sup>lt;sup>3</sup> Temperature range over which these specification are valid.

<sup>&</sup>lt;sup>4</sup> This range is underneath and above the operating temperature range, within the open circuit is fully functional and could be used without damage.

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#### Declaration of calibration options

#### **Factory Calibration**

Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, **traceable to Rosenberger standards**, national / international standards are not available. Model based standard definitions are individually optimized and reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

#### **Accredited Calibration**

Not available.

For further, more detailed information see application note AN001 on the Rosenberger homepage.

#### **Calibration interval**

Recommendation

12 months

#### **Packing**

Standard Weigth 1 pce in box 5.0 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
Marcel Panicke	12.10.09	Markus Müller	07.11.16	e00	15-1674	Marion Striegler	07.11.16

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