

All dimensions are in mm

Interface

according to

IEC 61169-54

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor

Material

CuBe
CuBe or equiv.

Plating

Gold, min. 1.27 μm , over nickel
AuroDur®, gold plated

Electrical data

Frequency range	DC to 12 GHz
Return loss	≤ 0.15 dB, DC to 12 GHz
Error from nominal phase ¹	$\leq 2.0^\circ$, DC to 4 GHz $\leq 2.5^\circ$, 4 GHz to 6 GHz $\leq 3.0^\circ$, 6 GHz to 12 GHz

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductances.

Mechanical data

Mating cycles	≥ 100
Maximum torque	5 Nm
Recommended torque	2 Nm
Gauge	3.10 mm to 3.20 mm

General standard definitions

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	80.055 ps
Length (electrical) / Offset Length	24.00 mm
Offset Loss	0.70 G Ω /s
Loss	0.0097 dB/ $\sqrt{\text{GHz}}$
Short Inductance ²	

² Short Inductances are determined individually for each short circuit and are documented in a Calibration Certificate.


Environmental data

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

RoHS	compliant
------	-----------

³ Temperature range over which these specification are valid.

⁴ This range is underneath and above the operating temperature range, within the short circuit is fully functional and could be used without damage.

Technical Data Sheet				Rosenberger			
4.3-10		Short Circuit Jack		64K12S-000S3			
<div>Declaration of calibration options</div> <div>Factory Calibration</div> <p>Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, traceable to national / international standards. Model based standard definitions are reported in Keysight / Agilent, Rohde & Schwarz and Anritsu compatible VNA formats.</p> <div>Accredited Calibration</div> <p>Not available.</p> <p>For further, more detailed information see application note AN001 on the Rosenberger homepage.</p> <div>Calibration interval</div> <p>Recommendation12 months</p> <div>Weight</div> <p>52 g/pce</p>							
<div><div><p>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.</p></div><div><p>For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.</p></div></div>							
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
M. Panicke	02.09.16	M. Hantschel	22.11.24	d00	24-2048	D. d'Argent	22.11.24
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.com				Tel. : +49 8684 18-0 Email : info@rosenberger.com			Page 3 / 3