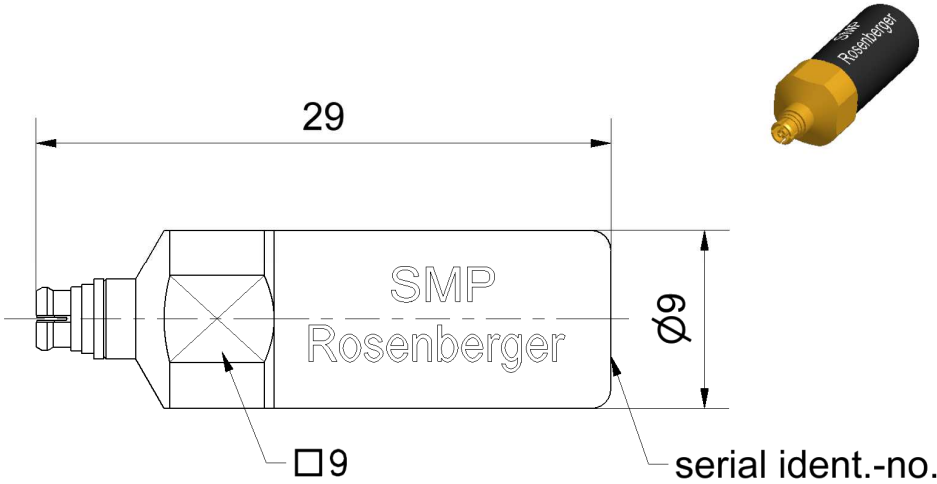


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RF_35/09.14/6.2

Technical Data Sheet		Rosenberger									
SMP	Short Circuit Jack	19K12S-000D3									
											
All dimensions are in mm; tolerances according to ISO 2768 m-H											
Interface According toMIL-STD-348											
Documents Application noteAN001 "Calibration Services"											
Material and plating <table><tr><td>Connector parts</td><td>Material</td><td>Plating</td></tr><tr><td>Center conductor</td><td>CuBe</td><td>Gold, min. 1.27 µm, over nickel</td></tr><tr><td>Outer conductor</td><td>CuBe</td><td>Gold, min. 1.27 µm, over nickel</td></tr></table>			Connector parts	Material	Plating	Center conductor	CuBe	Gold, min. 1.27 µm, over nickel	Outer conductor	CuBe	Gold, min. 1.27 µm, over nickel
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Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de		Tel. : +49 8684 18-0 Email : info@rosenberger.de									
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Electrical data

Frequency range	DC to 40 GHz
Return loss	≤ 0.20 dB, DC to 4 GHz ≤ 0.40 dB, 4 GHz to 18 GHz ≤ 0.80 dB, 18 GHz to 40 GHz
Error from nominal phase ¹	$\leq 2.5^\circ$, DC to 4 GHz $\leq 6.0^\circ$, 4 GHz to 18 GHz $\leq 8.0^\circ$, 18 GHz to 40 GHz

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

Mechanical data

Mating cycles	
if mating part is Smooth bore	≥ 1000
if mating part is Limited detent	≥ 500
if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore	9 N
- Limited detent	45 N
- Full detent	68 N
Disengagement force	
- Smooth bore	2.2 N
- Limited detent	9 N
- Full detent	22 N
Gauge	0.00 mm to 0.05 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_0 / Impedance / Z_0	50 Ω
Offset Delay	21.6816 ps
Length (electrical) / Offset Length	6.50 mm
Offset Loss	3.50 G Ω /s
Loss	0.0131 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.

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SMP		Short Circuit Jack		19K12S-000D3									
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 <table><tr><td>Recommendation</td><td>12 months</td></tr></table> Packing <table><tr><td>Standard</td><td>1 pce in box</td></tr><tr><td>Weight</td><td>7.6 g/pce</td></tr></table>								Recommendation	12 months	Standard	1 pce in box	Weight	7.6 g/pce
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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		Rev.		Engineering change number							
Approved		Date		Name		Date							
Marion Striegler		11.09.15		Markus Müller		07.11.16							
c00		15-1629		Marion Striegler		07.11.16							
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