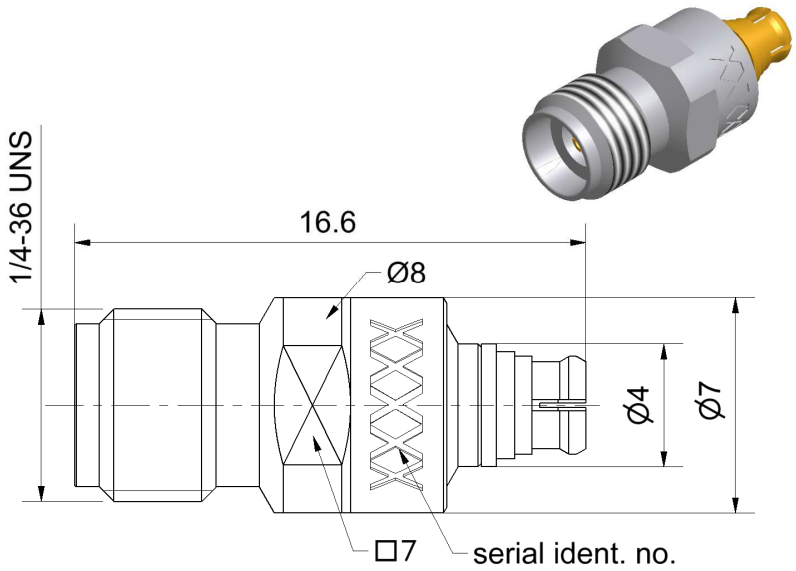
Technical Data Sheet	Rosenberger
Calibration Adaptor RPC-2.92 Jack – SMP Jack	**02K119-K20D3**



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

Interface

RPC-2.92 according to	IEC 60169-35
RPC-2.92 mechanically compatible with	RPC-3.50 and SMA
SMP according to	MIL-STD 348A, Fig. 326

Documents

Application note	AN001 “Calibration Services”

Material and plating

Connector parts	**Material**	**Plating**
Center conductor	CuBe	Gold, min. 1.27 µm, over nickel
Outer conductor RPC-2.92	Stainless steel	Passivated
Outer conductor SMP	CuBe	Gold, min. 1.27 µm, over nickel
Dielectric	PS	

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

Electrical data

Frequency	DC to 40 GHz
Return loss	≥ 32 dB, DC to 12 GHz ≥ 26 dB, 12 GHz to 26.5 GHz ≥ 21 dB, 26.5 GHz to 40 GHz

Mechanical data

	RPC-2.92	SMP
Mating cycles	≥ 500	≥ 100 if mating part is full detent ≥ 500 if mating part is limited detent ≥ 1000 if mating part is smooth bore
Maximum torque	1.70 Nm	
Recommended torque	0.90 Nm	
Engagement force		Full detent 68 N Limited detent 45 N Smooth bore 9 N
Disengagement force		Full detent 22 N Limited detent 9 N Smooth bore 2.2 N
Gauge	0.00 mm to 0.03 mm	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_o / Impedance / Z_o	50 Ω
Offset Delay	51.402 ps
Length (electrical) / Offset Length	15.41 mm
Offset Loss	4.00 GΩ/s
Loss	0.0179 dB/$\sqrt{\text{GHz}}$

Environmental data

Operating temperature range[1]	+20 °C to +26 °C
Rated temperature range of use[2]	0 °C to +50 °C
Storage temperature range	-40 °C to +85 °C
RoHS	compliant

[1] *Temperature range over which these specifications are valid.*
[2] *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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