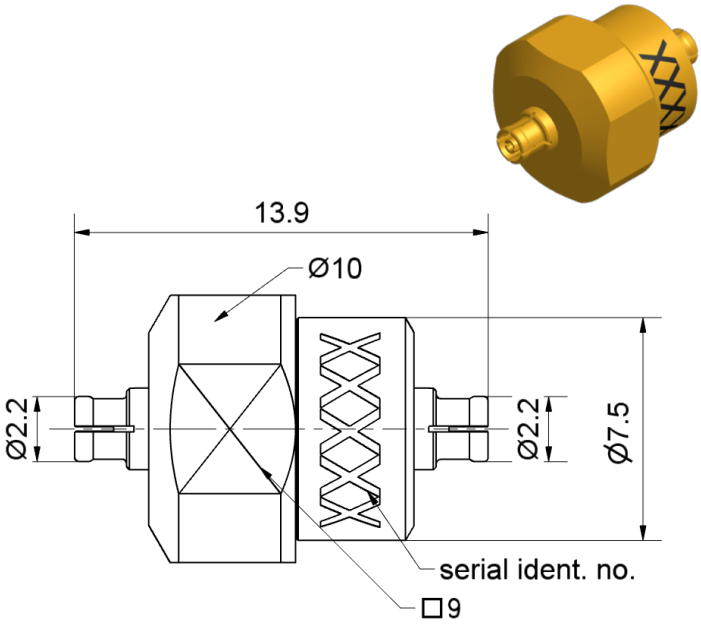
Technical Data Sheet		Rosenberger
Mini-SMP	Calibration Adaptor Jack/Jack	**18K121-K20D3**



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	**Material**	**Plating**
Center conductor	CuBe	Gold, min. 1.27 µm, over nickel
Outer conductor	CuBe	Gold, min. 1.27 µm, over nickel
Dielectric	PEEK	

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Electrical data

Frequency range	DC to 40 GHz
Return loss	≥ 24 dB, DC to 18 GHz ≥ 16 dB, 18 GHz to 40 GHz

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	50.0346 ps
Length (electrical) / Offset Length	15.00 mm
Offset Loss	4.00 GΩ/s
Loss	0.0348 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 specification are valid.*

[2] *This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.*

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