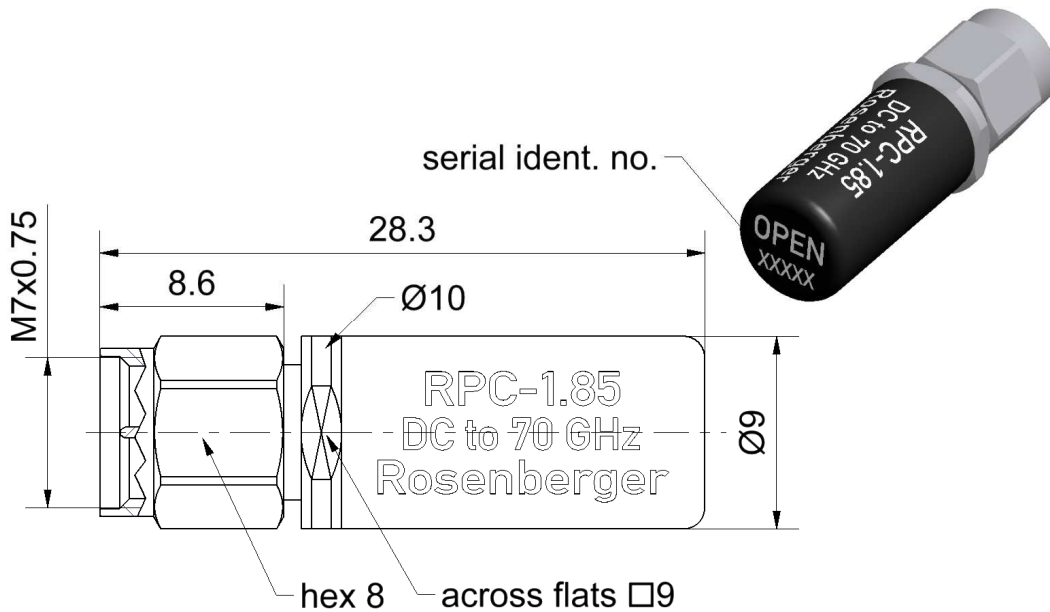


RPC-1.85 Open Circuit Plug

08S12L-000S3



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

Interface

According to IEC 61169-32
Mechanically compatible with RPC-2.40

Documents

Application note AN001 "Calibration Services"

Material and plating

Connector parts

	Material	Plating
Center conductor	Beryllium copper	Gold, min. 1.27 µm, over nickel
Outer conductor	Stainless steel	Passivated
Coupling nut	Stainless steel	Passivated
Dielectric	PS	

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RF_35/05:10/6.0

Electrical data

Frequency range	DC to 70 GHz
Return loss	≤ 0.20 dB, DC to 4 GHz
	≤ 0.30 dB, 4 GHz to 40 GHz
	≤ 0.40 dB, 40 GHz to 70 GHz
Error from nominal phase ¹	≤ 2.0°, DC to 4 GHz
	≤ 5.0°, 4 GHz to 40 GHz
	≤ 8.0°, 40 GHz to 70 GHz

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Fringing Capacitance

Mechanical data

Mating cycles	≥ 500
Maximum torque	1.65 Nm
Recommended torque	0.90 Nm
Gauge	0.00 mm to 0.03 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	16.680 ps
Length (electrical) / Offset Length	5.00 mm
Offset Loss	3.75 G Ω /s
Loss	0.0109 dB/ $\sqrt{\text{GHz}}$
Fringing Capacitances ²	

² Fringing Capacitances are determined individually for each Open 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 specifications are valid.

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

