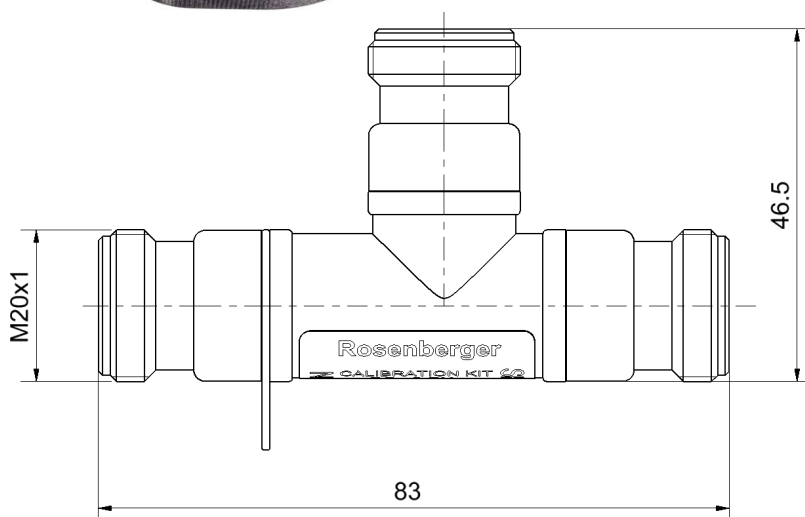




All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to

IEC 60169-11, DIN 47231

Documents

N/A

Material and plating

Connector parts

Center conductor
Outer conductor
Body
Dielectric
Substrate

Material

CuBe
Stainless steel
Brass
PTFE
Al₂O₃

Plating

Gold, min. 1.27 µm, over nickel
Passivated
White bronze(e.g. Optalloy®); powder-coated

Electrical data

Frequency range DC to 6 GHz

Open

Return loss ≤ 0.15 dB, DC to 6 GHz

Error from nominal phase¹ $\leq 3.0^\circ$, DC to 6 GHz

Short

Return loss ≤ 0.15 dB, DC to 6 GHz

Error from nominal phase² $\leq 2.0^\circ$, DC to 6 GHz

Load

Return loss ≥ 42 dB, DC to 2.5 GHz

≥ 38 dB, 2.5 GHz to 6 GHz

DC-Resistance $50 \Omega \pm 0.5 \Omega$

Power handling ≤ 1.0 W

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

² The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductance

Mechanical data

Mating cycles ≥ 500

Maximum torque 15 Nm

Recommended torque 2 Nm

Gauge 4.95 mm to 5.03 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.

Open

Offset Z_0 / Impedance / Z_0 50 Ω

Offset Delay 56.706 ps

Length (electrical) / Offset Length 17.00 mm

Offset Loss 0.70 G Ω /s

Loss 0.0069 dB/ $\sqrt{\text{GHz}}$

Fringing Capacitances $C_0 = -2.20330 \times 10^{-15}$ F / -2.20330 fF

$C_1 = -4549.25 \times 10^{-27}$ F/Hz / -4.54925 fF /GHz

$C_2 = 2759.57 \times 10^{-36}$ F/Hz² / 2.75957 fF /GHz²

$C_3 = -304.660 \times 10^{-45}$ F/Hz³ / -0.30466 fF /GHz³

Technical Data Sheet

4.1-9.5

Calibration Kit
Jack

65K36R-MSOS3

Short

Offset Z_0 / Impedance / Z_0	50 Ω		
Offset Delay	56.706 ps		
Length (electrical) / Offset Length	17.00 mm		
Offset Loss	0.70 G Ω /s		
Loss	0.0069 dB/ $\sqrt{\text{GHz}}$		
Short Inductance	$L_0 = 0.0000 \times 10^{-12}$ H	/	0.0000 pH
	$L_1 = 0.0000 \times 10^{-24}$ H/Hz	/	0.0000 pH/GHz
	$L_2 = 0.0000 \times 10^{-33}$ H/Hz ²	/	0.0000 pH/GHz ²
	$L_3 = 0.0000 \times 10^{-42}$ H/Hz ³	/	0.0000 pH/GHz ³

Load

Offset Z_0 / Impedance / Z_0	50 Ω
Offset Delay	0.0000 ps
Length (electrical) / Offset Length	0.000 mm
Offset Loss	0.00 G Ω /s
Loss	0.0000 dB/ $\sqrt{\text{GHz}}$

Environmental data

Operating temperature range ³	0 °C to +50 °C
Storage temperature range	-55 °C to +90 °C
RoHS	compliant

³ Temperature range over which these specifications are valid.

Packing

Standard	1 pce in bag
Weight	218 g/pce

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	Approved	Date	Rev.	Engineering change number	Name	Date
Marcel Panicke	01/10/13	Markus Müller	14/08/14	b00	14-1131	Marion Striegler	14/08/14
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