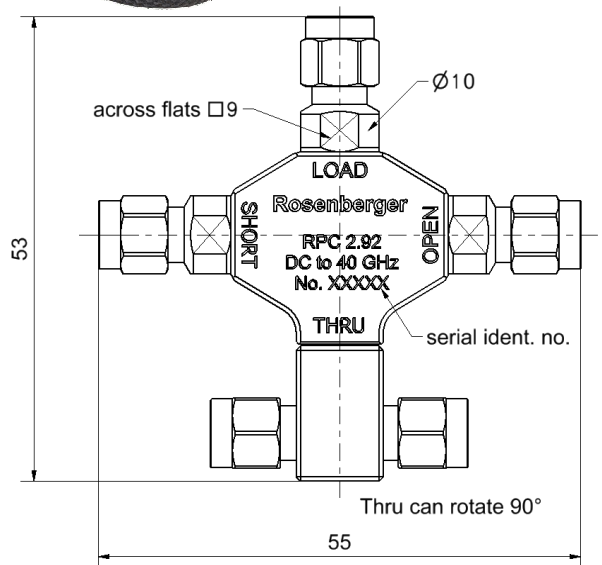


Standard		Thru (m)	Load (m)	Open (m)	Unit	Short (m)
Min. Freq.	0	0	0	0	GHz	0
Max. Freq.	40	40	40	40	GHz	40
Impedance (ohm)	50	50	50	50	ohm	50
Coaxity (ohm)	75.0	0	0	0	ohm	0
Length	0.0150	0	0.0150	0.0150	mm	0.0150
Co / Freq.	0.0000	0	0.0000	0.0000	ps/GHz	0.0000
Co / Freq.	1.1800	1.1800	1.1800	1.1800	ps/GHz	1.1800
Co / Freq.	0.0000	0.0000	0.0000	0.0000	ps/GHz	0.0000
Co / Freq.	0.0000	0.0000	0.0000	0.0000	ps/GHz	0.0000



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

**Interface**

According to  
Mechanically compatible with

IEC 61169-35  
RPC-3.50 and SMA

**Contents and Documentation**

This kit is delivered with

- **Standard Definitions Card**  
Printed Standard Definitions that can be used on nearly all Vector Network Analyzers
- **Test Results Documentation**
- **Hard Shell Case**

**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Coupling nut  
Body  
Dielectric  
Substrate

**Material**

Beryllium copper  
Stainless steel  
Stainless steel  
Aluminum  
PS  
Al<sub>2</sub>O<sub>3</sub>

**Plating**

Gold, min. 1.27 µm, over nickel  
Passivated  
Passivated  
black anodized

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RF\_35/09;14/6.2

**Electrical data**

Frequency range DC to 40.0 GHz

**Thru**

Return loss  $\geq 32$  dB, DC to 4 GHz  
 $\geq 30$  dB, 4 GHz to 26.5 GHz  
 $\geq 28$  dB, 26.5 GHz to 40 GHz

**Open**

Error from nominal phase<sup>1</sup>  $\leq 1.5^\circ$ , DC to 4 GHz  
 $\leq 4.0^\circ$ , 4 GHz to 26.5 GHz  
 $\leq 5.0^\circ$ , 26.5 GHz to 40.0 GHz

**Short**

Error from nominal phase<sup>2</sup>  $\leq 1.5^\circ$ , DC to 4 GHz  
 $\leq 4.0^\circ$ , 4 GHz to 26.5 GHz  
 $\leq 5.0^\circ$ , 26.5 GHz to 40.0 GHz

**Load**

Return loss  $\geq 40.0$  dB, DC to 4 GHz  
 $\geq 28.0$  dB, 4 GHz to 26.5 GHz  
 $\geq 25.0$  dB, 26.5 GHz to 40.0 GHz

DC Resistance  $50 \Omega \pm 0.5 \Omega$   
 Power handling  $\leq 0.5$  W

<sup>1</sup> The nominal phase is defined by the Offset Delay, the Offset Loss and the Fringing Capacitances

<sup>2</sup> The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductance

**Mechanical data**

Mating cycles  $\geq 500$   
 Maximum torque 1.70 Nm  
 Recommended torque 0.90 Nm  
 Gauge 0.00 mm to 0.08 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.

**Thru**

Offset  $Z_0$  / Impedance /  $Z_0$  50  $\Omega$   
 Offset Delay 83.057 ps  
 Length (electrical) / Offset Length 24.90 mm  
 Offset Loss 2.70 G $\Omega$ /s  
 Loss 0.0195 dB/ $\sqrt{\text{GHz}}$   
 Line Loss @ 1GHz 0.0008 dB/mm

**Open**

Offset  $Z_0$  / Impedance /  $Z_0$  50  $\Omega$   
 Offset Delay 28.353 ps  
 Length (electrical) / Offset Length 8.50 mm  
 Offset Loss 2.40 G $\Omega$ /s  
 Loss 0.0118 dB/ $\sqrt{\text{GHz}}$   
 Fringing Capacitances  $C_0 = -7.38000 \times 10^{-15}$  F / -7.38000 fF  
 $C_1 = 1180.00 \times 10^{-27}$  F/Hz / 1.18000 fF /GHz  
 $C_2 = -44.8000 \times 10^{-36}$  F/Hz<sup>2</sup> / -0.04480 fF /GHz<sup>2</sup>  
 $C_3 = 0.54000 \times 10^{-45}$  F/Hz<sup>3</sup> / 0.00054 fF /GHz<sup>3</sup>

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**Short**

Offset $Z_0$ / Impedance / $Z_0$	50 $\Omega$		
Offset Delay	28.353 ps		
Length (electrical) / Offset Length	8.50 mm		
Offset Loss	2.40 G $\Omega$ /s		
Loss	0.0118 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 <sup>2</sup>	/	0.0000 pH/GHz <sup>2</sup>
	$L_3 = 0.0000 \times 10^{-42}$ H/Hz <sup>3</sup>	/	0.0000 pH/GHz <sup>3</sup>

**Load**

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

**Environmental data**

Operating temperature range <sup>3</sup>	+20 °C to +26 °C
Rated temperature range of use <sup>4</sup>	0 °C to +50 °C
Storage temperature range	-40 °C to +85 °C
RoHS	compliant

<sup>3</sup> Temperature range over which these specifications are valid.

<sup>4</sup> This range is underneath and above the operating temperature range, within the calibration kit is fully functional and could be used without damage

**Declaration of documentation**

Standard delivery for this kit includes Test Results. The documentation issued reports which quantities were tested individually, traceable to national / international standards. Model based standard definitions of the calibration standards are reported in Agilent / Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

**Inspection interval**

Recommendation	12 months
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**Packing**

Standard	1 pce in bag
Weight	42 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	05.11.15	Markus Müller	02.05.18	h00	18-0787	Marion Striegler	02.05.18



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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