



All dimensions are in mm; tolerances:  $\pm 3\text{mm}$  for  $A \leq 300\text{ mm}$ ;  $\pm 1\%$  for  $A > 300\text{ mm}$

**Available variants**

Type	max. Insertion loss at 40 GHz	Marking	Weight (g) / pce
LU1-045-XXX	$\leq 0.00285\text{ dB/mm} * A\text{ mm} + 0.90\text{ dB}$	ROSENBERGER YYYY-WW LU1-045-XXX FAC-RRRRRRR ssss	$0.216\text{ g/mm} * A\text{ mm} + 197\text{ g}$

XXX – length in mm = A

WW – week

YYYY – year

ssss – serial no.

FAC – Factory Code

RRRRRRR – lot nr.

**Assembly parts**

Connector left	RPC-2.40 ruggedized jack	09KR123-2U1S3
Connector right	RPC-2.92 jack	02K123-2U1S3
Cable	RTK 106	

**Electrical data**

Impedance	50 $\Omega$
Frequency	DC to 40 GHz
Return loss <sup>1</sup>	$\geq 26\text{ dB}$ , DC to 4 GHz $\geq 17\text{ dB}$ , 4 GHz to 40 GHz
Insertion loss <sup>1</sup>	see table available variants
Phase deviation: After 90° bending	$\leq 1.3^\circ$ , DC to 4 GHz $\leq 6.0^\circ$ , 4 GHz to 40 GHz
Straight after 3x90° bending	$\leq 1.0^\circ$ , DC to 4 GHz $\leq 4.0^\circ$ , 4 GHz to 40 GHz
Amplitude stability	$\leq 0.03\text{ dB}$ , DC to 4 GHz $\leq 0.08\text{ dB}$ , 4 GHz to 40 GHz
Return loss stability	$\geq 45\text{ dB}$ , DC to 4 GHz $\geq 35\text{ dB}$ , 4 GHz to 40 GHz
Shielding Effectiveness	$\geq 100\text{ dB}$ up to 1 GHz

Individual testing and documentation:

Measurement plot with all 4 S-Parameters (S11; S22; S21; S12) is included with the cable assembly and on the backside the care and handling instruction is printed. Measurement adaptors used are mentioned in the commentary field.

<sup>1</sup> Including measurement adaptor if necessary

# Technical Data Sheet

# Rosenberger

Cable assembly  
RPC-2.40 Jack / RPC-2.92

## LU1-045-XXX

### Mechanical data

Minimum bend radius: 60 mm (Single and Multiple)

### Environmental data

Temperature range -40°C to +85°C  
RoHS compliant

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

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
Herbert Babinger	17.07.06	M. Moder	08.06.16	k00	16-0803	K. Mitterer	08.06.16

  

Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>	Tel. : +49 8684 18-0 Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>	Page 2 / 2
--	--	---------------

RF\_35/05.10/6.0