



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



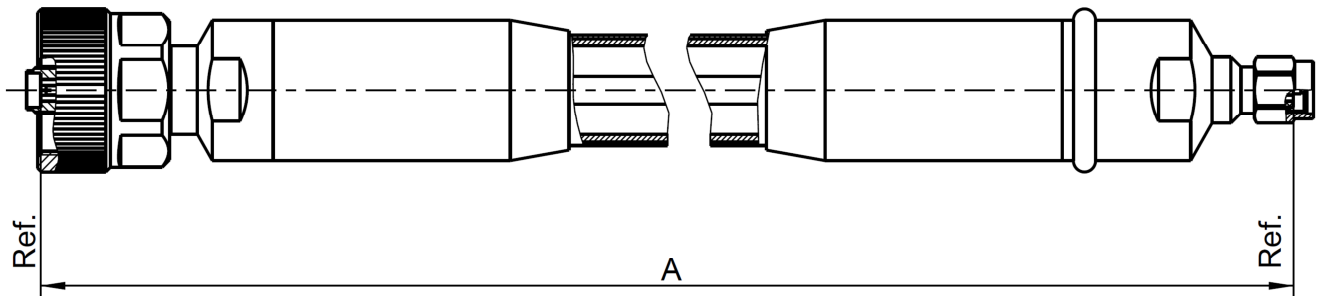
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All dimensions are in mm; tolerances:  $\pm 3\text{mm}$  for  $A \leq 300\text{ mm}$ ;  $\pm 1\%$  for  $A > 300\text{ mm}$

**Available variants**

| Type        | max. Insertion loss at 40 GHz                             | Weight (g) / pce                                   |
|-------------|---|--|
| LU1-005-XXX | $\leq 0.00285\text{ dB/mm} * A\text{ mm} + 0.6\text{ dB}$ | $0.216\text{ g/mm} * A\text{ mm} + 206.4\text{ g}$ |

XXX – length in mm = A

Note: max. Insertion Loss:  
First constant = Cable attenuation in dB /mm; Second Constant = Connector left and Connector right +needed Adaptor

Weight:  
First constant = Cable- and Armour- weight per mm; Second Constant = Connector left and Connector right weight per pce

**Assembly parts**

|                 |   |               |
|-----------------|---|---------------|
| Connector left  | RPC-2.92 ruggedized jack                                  | 02KR123-2U1S3 |
| Connector right | RPC-2.92 plug   | 02S123-2U1S3  |
| Cable           | RTK 106   |               |
| Armour          | Metal tubing with fixed bending rate and protection braid |               |

# Technical Data Sheet

# Rosenberger

## Cable assembly

RPC-2.92 jack / plug – RTK 106 – VA Armour

## LU1-005-XXX

### Electrical data

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

Individual testing and documentation:

Phase deviation, Amplitude stability and Return Loss stability is tested according to the specification. 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> Return Loss and Insertion Loss includes the measurement adaptor

### Mechanical data

|                      |       |
|----------------------|-------|
| Minimum bend radius: | 60 mm |
|----------------------|-------|

### Environmental data

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

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     |
|----------|----------|-------------|----------|------|---------------------------|-------------|----------|
| M. Moder | 24.10.16 | H. Babinger | 10.11.16 | g00  | 16-s332                   | S. Andorfer | 10.11.16 |

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