

# Technical Data Sheet

# Rosenberger

Cable assembly  
RPC-1.85 / Mini SMP – RTK-Flex047

## 70W-08K1-18K1-XXXXX



All dimensions are in mm; tolerances:  
 $\leq 100$ :  $XXX \pm 2.0$ ;  $> 100$  to  $\leq 1500$ :  $XXX \pm 5.0$ ;  $> 1500$  to  $\leq 3000$ :  $XXX \pm 10.0$ ;  $> 3000$ :  $\pm 1.5\%$

### Available variants

| Type                | Max Insertion Loss                 | Marking                                 | Weight (g) / pce        |
|---------------------|------------------------------------|---|-------------------------|
| 70W-08K1-18K1-XXXXX | $\leq 0.013$ dB/mm * A mm +0.73 dB | ROSENBERGER YYWW<br>70W-08K1-18K1-XXXXX | 0.0052 g/mm * A mm +3 g |

XXXXX – length in mm = A  
 WW – week YY – year

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

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

### Assembly parts

|                 |               |              |
|-----------------|---------------|--------------|
| Connector left  | RPC-1.85 Jack | 08K141-270L5 |
| Connector right | Mini SMP Jack | 18K101-270L5 |
| Cable           | RTK-Flex047   |              |

### Electrical data

|                             |  |
|-----------------------------|--|
| Impedance                   | 50 $\Omega$  |
| Frequency                   | DC to 65 GHz   |
| Return Loss <sup>1</sup>    | $\geq 16$ dB, DC to 18 GHz<br>$\geq 12.5$ dB, 18 GHz to 40 GHz<br>$\geq 9$ dB, 40 GHz to 50 GHz<br>$\geq 8$ dB, 50 GHz to 65 GHz |
| Insertion Loss <sup>1</sup> | see table available variants   |

<sup>1</sup> Return Loss and Insertion Loss includes the measurement adaptor

### Mechanical data

|                      |       |
|----------------------|-------|
| Minimum bend radius: |       |
| Single               | 5 mm  |
| Multiple             | 10 mm |

### Environmental data

|                   |                 |
|-------------------|-----------------|
| Temperature range | -55°C to +125°C |
| RoHS              | compliant       |

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| Draft   | Date     | Approved     | Date     | Rev.  | Engineering change number | Name         | Date          |
|---|----------|--------------|----------|---|---------------------------|--------------|---------------|
| Lizzy Beller  | 01/07/20 | Mark Bennett | 01/17/20 | 100   | Preliminary               | Mark Bennett | 01/17/20      |
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