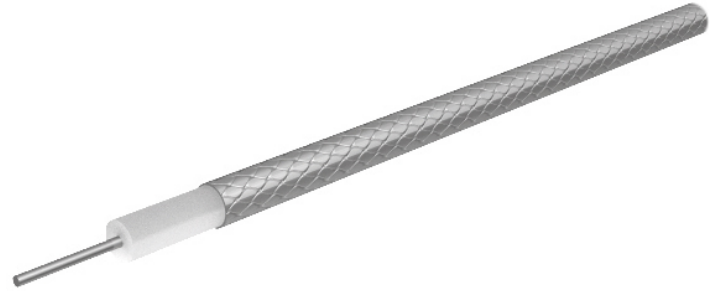


## Coaxial Cable SUCOFORM\_47\_CU

### Description

SUCOFORM, the handformable microwave cable



### Technical Data

#### Construction

|                  | Material                       | Detail                 | Diameter |
|------------------|--------------------------------|------------------------|----------|
| Centre conductor | Copper, Silver plated          | Wire                   | 0.31 mm  |
| Dielectric       | PTFE (Polytetrafluoroethylene) |                        | 0.94 mm  |
| Outer conductor  | Copper, Tin plated             | Tin soaked braid, 100% | 1.19 mm  |

#### Electrical Data

|                                |                                      |
|--------------------------------|--------------------------------------|
| Impedance                      | 50 Ω +/- 2                           |
| Operating Frequency            | 40 GHz                               |
| Capacitance                    | 95 pF/m                              |
| Velocity of signal propagation | 71 %                                 |
| Signal delay                   | 4.7 ns/m                             |
| Insulation resistance          | ≥ 1 x 10 <sup>8</sup> MΩm            |
| Min. screening effectiveness   | ≥ 100 dB (up to 18 GHz)              |
| Max. operating voltage         | ≤ 1 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 2 kV <sub>rms</sub> (50 Hz/1 min)    |

#### Mechanical Data

|                     |                   |
|---------------------|-------------------|
| Weight              | 0.55 kg/100 m     |
| Min. bending radius | static<br>3.18 mm |

#### Environmental Data

|                          |                   |
|--------------------------|-------------------|
| Temperature range        | -65 °C... +165 °C |
| Installation temperature | -20 °C... +60 °C  |
| 2011/65/EU (RoHS)        | compliant         |

### Additional Information

#### Ordering Information

|          |                |
|----------|----------------|
| Order as | SUCOFORM_47_CU |
|----------|----------------|

#### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

|             |                  |
|-------------|------------------|
| Cable group | Y2 1 mm / 50 Ohm |
|-------------|------------------|

## Coaxial Cable SUCOFORM\_47\_CU

**Matrix** typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

Coefficients:

a = 1.133

b = 0.0396

$f_{\max} = 40$

P at 1GHz = 32

| Frequency<br>(GHz) | Nom. attenuation<br>(dB / m)<br>sea level 25° C<br>ambient<br>temperature | Nom. attenuation<br>(dB / ft)<br>sea level 25° C<br>ambient<br>temperature | Max. CW power<br>(watt)<br>sea level 40° C<br>ambient<br>temperature |
|--------------------|---|--|--|
| 2,0                | 1,68  | 0,512  | 23   |
| 4,0                | 2,42  | 0,739  | 16   |
| 6,0                | 3,01  | 0,918  | 13   |
| 8,0                | 3,52  | 1,073  | 11   |
| 10,0               | 3,98  | 1,213  | 10   |
| 12,0               | 4,4   | 1,341  | 9  |
| 14,0               | 4,79  | 1,461  | 9  |
| 16,0               | 5,17  | 1,574  | 8  |
| 18,0               | 5,52  | 1,682  | 8  |
| 20,0               | 5,86  | 1,786  | 7  |
| 22,0               | 6,19  | 1,885  | 7  |
| 24,0               | 6,5   | 1,981  | 7  |
| 26,0               | 6,81  | 2,075  | 6  |
| 28,0               | 7,1   | 2,165  | 6  |
| 30,0               | 7,39  | 2,253  | 6  |
| 32,0               | 7,68  | 2,340  | 6  |
| 34,0               | 7,95  | 2,424  | 5  |
| 36,0               | 8,22  | 2,506  | 5  |
| 38,0               | 8,49  | 2,587  | 5  |
| 40,0               | 8,75  | 2,667  | 5  |