

## Coaxial Cable SUCOFORM\_141\_CU

### Description

SUCOFORM, the handformable microwave cable



### Technical Data

#### Construction

|                  | Material                       | Detail                 | Diameter |
|------------------|--------------------------------|------------------------|----------|
| Centre conductor | Copper, Silver plated          | Wire                   | 0.95 mm  |
| Dielectric       | PTFE (Polytetrafluoroethylene) |                        | 2.95 mm  |
| Outer conductor  | Copper, Tin plated             | Tin soaked braid, 100% | 3.58 mm  |

Print: HUBER+SUHNER SUCOFORM 141 Cu 50 Ohm (PA no.)

#### Electrical Data

|                                |  |
|--------------------------------|--|
| Impedance                      | 50 Ω +/- 2                             |
| Operating Frequency            | 33 GHz                                 |
| Capacitance                    | 92 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         | ≤ 1.9 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 5 kV <sub>rms</sub> (50 Hz/1 min)      |

#### Mechanical Data

|                     |                              |            |
|---------------------|------------------------------|------------|
| Weight              |                              | 4 kg/100 m |
| Min. bending radius | static                       | 8 mm       |
|                     | repeated (for ≤ 50 bendings) | 40 mm      |

#### Environmental Data

|                          |                                     |
|--------------------------|-------------------------------------|
| Temperature range        | -65 °C... +165 °C                   |
| Installation temperature | -20 °C... +60 °C                    |
| Flammability             | IEC 60332-1, UL 1581 § 1080 (VW-1), |
| 2011/65/EU (RoHS)        | compliant                           |

### Additional Information

#### Ordering Information

Order as SUCOFORM\_141\_CU

#### Remarks

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

#### Suitable Connectors

Cable group Y12 3 mm / 50 Ohm

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

Coefficients:

a = 0.355                      b = 0.04                       $f_{max} = 33$                       P at 1GHz = 425

| 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 |
|--------------------|---|--|--|
| 1.65               | 0.52  | 0.159  | 331  |
| 3.3                | 0.78  | 0.237  | 234  |
| 4.95               | 0.99  | 0.301  | 191  |
| 6.6                | 1.18  | 0.358  | 165  |
| 8.25               | 1.35  | 0.411  | 148  |
| 9.9                | 1.51  | 0.461  | 135  |
| 11.55              | 1.67  | 0.509  | 125  |
| 13.2               | 1.82  | 0.554  | 117  |
| 14.85              | 1.96  | 0.598  | 110  |
| 16.5               | 2.1   | 0.641  | 105  |
| 18.15              | 2.24  | 0.682  | 100  |
| 19.8               | 2.37  | 0.723  | 96   |
| 21.45              | 2.5   | 0.763  | 92   |
| 23.1               | 2.63  | 0.802  | 88   |
| 24.75              | 2.76  | 0.840  | 85   |
| 26.4               | 2.88  | 0.878  | 83   |
| 28.05              | 3.0   | 0.915  | 80   |
| 29.7               | 3.12  | 0.952  | 78   |
| 31.35              | 3.24  | 0.988  | 76   |
| 33.0               | 3.36  | 1.024  | 74   |