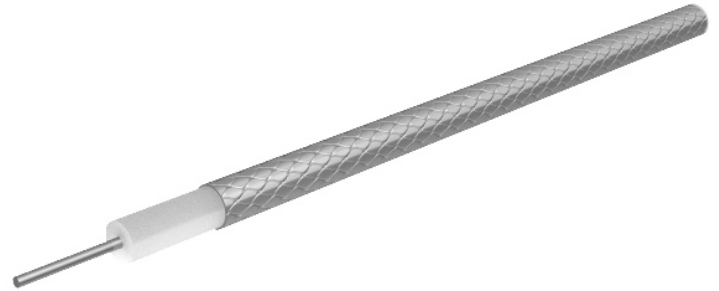


Formable microwave cable SUCOFORM_47_CU

Description

Sucoform: Formstable, hand-formable alternatives to semi-rigid microwave cables

Non-magnetic, 50 Ohm, 40 GHz, 165°C, ø1.19 mm, no jacket



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 ⁸ MΩm |
| Min. screening effectiveness | ≥ 100 dB (up to 18 GHz) |
| Max. operating voltage | ≤ 1 kV _{rms} (at sea level) |
| Test voltage | 2 kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | |
|---------------------|-------------------|
| Weight | 0.55 kg/100 m |
| Min. bending radius | static 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 |
|-------------|------------------|

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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 = 1.133

b = 0.0396

$f_{\max} = 40$

P at 1GHz = 32

| Frequency (GHz) | Nom. attenuation (dB / m) sea level 25° C ambient temperature | Nom. attenuation (dB / ft) sea level 25° C ambient temperature | Max. CW power (watt) sea level 40° C ambient 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 |