

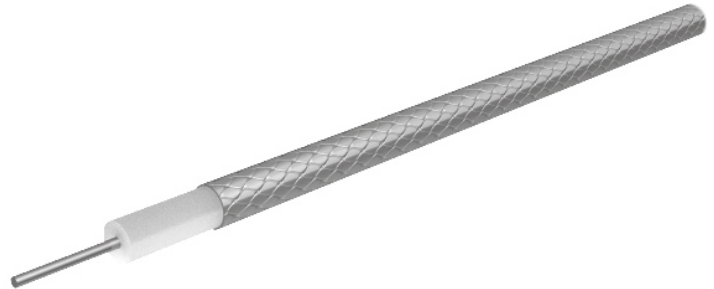
Formable microwave cable

SUCOFORM_250-01 Item: 84007938

Description

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

RG401 dimension, 50 Ohm, 18 GHz, 165°C, ø6.3 mm, no jacket



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--------------------------------|------------------------|----------|
| Centre conductor | Copper, Silver plated | Wire | 1.67 mm |
| Dielectric | PTFE (Polytetrafluoroethylene) | | 5.24 mm |
| Outer conductor | Copper, Tin plated | Tin soaked braid, 100% | 6.3 mm |

Print: HUBER+SUHNER SUCOFORM 250-01 50 Ohm (PA no.)

Electrical Data

| | |
|--------------------------------|--|
| Impedance | 50 Ω +/- 2 |
| Operating Frequency | 18 GHz |
| Capacitance | 95 pF/m |
| Velocity of signal propagation | 71 % |
| Signal delay | 4.7 ns/m |
| Screening effectiveness | ≥ 100 dB (up to 18 GHz) |
| Operating voltage | ≤ 3.5 kV _{rms} (at sea level) |
| Test voltage | 7.5 kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | |
|---------------------|---------------------------|
| Weight | 12.5 kg/100 m |
| Min. bending radius | static 30 mm 120 mm |

Environmental Data

| | |
|--|------------------------------------|
| Temperature range | -65 °C ... +165 °C |
| Installation temperature | -20 °C... +60 °C |
| Flame propagation test | IEC 60332-1, UL 1581 § 1080 (VW-1) |
| Halogen free | No |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant |
| 1907/2006/EC (REACH) | compliant |
| 2000/53/EC (ELV) | compliant |
| 2012/19/EU (WEEE) | no special marking needed |

Additional Information

Remarks

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

Suitable Connectors

| | |
|-------------|-------------------|
| Cable group | Y14 5 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 = 0.21

b = 0.031

f_{max} = 18

P at 1GHz = 920

| Frequency | Nom. attenuation | Nom. attenuation | Max. CW power |
|-----------|---|---|---|
| (GHz) | (dB / m) | (dB / ft) | (W) |
| | sea level 25° C ambient temperature | sea level 25° C ambient temperature | sea level 40° C ambient temperature |
| 0,9 | 0,23 | 0,069 | 970 |
| 1,8 | 0,34 | 0,103 | 686 |
| 2,7 | 0,43 | 0,131 | 560 |
| 3,6 | 0,51 | 0,155 | 485 |
| 4,5 | 0,58 | 0,178 | 434 |
| 5,4 | 0,66 | 0,200 | 396 |
| 6,3 | 0,72 | 0,220 | 367 |
| 7,2 | 0,79 | 0,240 | 343 |
| 8,1 | 0,85 | 0,259 | 323 |
| 9,0 | 0,91 | 0,277 | 307 |
| 9,9 | 0,97 | 0,295 | 292 |
| 10,8 | 1,02 | 0,312 | 280 |
| 11,7 | 1,08 | 0,329 | 269 |
| 12,6 | 1,14 | 0,346 | 259 |
| 13,5 | 1,19 | 0,363 | 250 |
| 14,4 | 1,24 | 0,379 | 242 |
| 15,3 | 1,3 | 0,395 | 235 |
| 16,2 | 1,35 | 0,411 | 229 |
| 17,1 | 1,4 | 0,426 | 222 |
| 18,0 | 1,45 | 0,442 | 217 |