

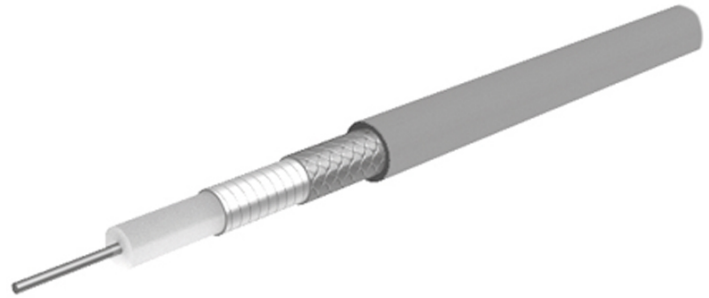
Flexible microwave cable

SUCOFLEX_550 Item: 85084749 Only as Assembly

Description

SUCOFLEX 500: The phase stable, low loss assemblies for flexible applications

High-flexible, 50 Ohm, 50 GHz, 165°C, ø3.65 mm, PTFE jacket



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--------------------------------------|--------------------|----------|
| Centre conductor | Copper, Silver plated | Strand, Low-loss | |
| Dielectric | PTFE-LD | | |
| Outer conductor | Copper, Silver plated | wrapped Foil, 100% | |
| Outer conductor | Copper, Silver plated | Braid | |
| Jacket | FEP (Fluorinated ethylene propylene) | RAL 5000 - bl | 3.65 mm |

Electrical Data

| | |
|--------------------------------|--|
| Impedance | 50 Ω |
| Operating Frequency | 50 GHz |
| Capacitance | 87 pF/m |
| Velocity of signal propagation | 77 % |
| Signal delay | 4.3 ns/m |
| Screening effectiveness | ≥ 90 dB (up to 18 GHz) |
| Operating voltage | ≤ 1.2 kV _{rms} (at sea level) |

Mechanical Data

| | | |
|---------------------|---------|--------------|
| Weight | | 3.3 kg/100 m |
| Min. bending radius | static | 11 mm |
| | dynamic | 20 mm |

Environmental Data

| | |
|--|---------------------------|
| Temperature range | -55 °C ... +165 °C |
| 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 U98 SUCOFLEX

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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 = 0.4255

b = 0.01

$f_{\max} = 50$

P at 1GHz = 296

| 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 (W) sea level 40° C ambient temperature |
|--------------------|---|--|---|
| 2.5 | 0.7 | 0.213 | 187 |
| 5.0 | 1.0 | 0.305 | 132 |
| 7.5 | 1.24 | 0.378 | 108 |
| 10.0 | 1.45 | 0.441 | 94 |
| 12.5 | 1.63 | 0.497 | 84 |
| 15.0 | 1.8 | 0.548 | 76 |
| 17.5 | 1.95 | 0.596 | 71 |
| 20.0 | 2.1 | 0.641 | 66 |
| 22.5 | 2.24 | 0.684 | 62 |
| 25.0 | 2.38 | 0.725 | 59 |
| 27.5 | 2.51 | 0.764 | 56 |
| 30.0 | 2.63 | 0.802 | 54 |
| 32.5 | 2.75 | 0.838 | 52 |
| 35.0 | 2.87 | 0.874 | 50 |
| 37.5 | 2.98 | 0.908 | 48 |
| 40.0 | 3.09 | 0.942 | 47 |
| 42.5 | 3.2 | 0.975 | 45 |
| 45.0 | 3.3 | 1.007 | 44 |
| 47.5 | 3.41 | 1.039 | 43 |
| 50.0 | 3.51 | 1.069 | 42 |