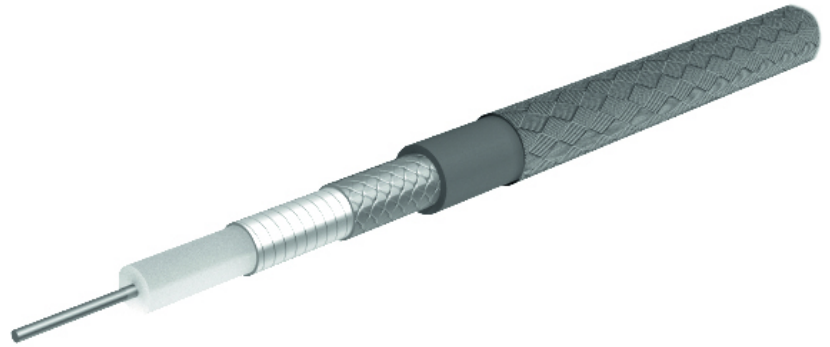


Flexible, 50 Ohm, 18 GHz, 165°C, Ø8.3 mm, Aramid jacket

SUCOFLEX_106_D

Properties

- Applicable up to 18 GHz
- Excellent insertion and return loss
- Extremely reliable and robust
- A wide range of cables, connectors and armours
- MIL qualified



| Construction | | | |
|------------------|--------------------------------------|--------------------|----------|
| Component | Material | Detail | Diameter |
| Centre conductor | Copper, Silver plated | Wire | |
| Dielectric | PTFE (Polytetrafluoroethylene) | | |
| Outer conductor | Copper, Silver plated | Wrapped foil, 100% | |
| Outer conductor | Copper, Silver plated | Braid | |
| Jacket | FEP (Fluorinated ethylene propylene) | | 7.9mm |
| Armour | PPTA (Aramid) | RAL 5000 - bl | 8.3mm |

| Electrical data | |
|----------------------------------|--------------------------------------|
| Impedance | 50 Ω |
| Operating frequency | ≤ 18 GHz |
| Capacitance | 87 pF |
| Velocity of signal propagation | 77 % |
| Signal delay | 4.3 ns/m |
| Screening effectiveness | 90 dB at frequency 0.1 GHz ... 18GHz |
| Insulation resistance | 100000000 MΩ*m |
| Operating Voltage (at sea level) | ≤ 3.8 kV |

| Mechanical data | |
|------------------------|-----------------|
| Weight | approx. 157 g/m |
| Static bending radius | ≥ 26 mm |
| Dynamic bending radius | < 45 mm |

| Environmental data | |
|-----------------------|-------------------|
| Operation temperature | -55 °C ... 165°C |
| Fire characteristics | contains halogene |

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SUCOFLEX_106_D

Suitable connectors

| | |
|-------------|-----|
| Cable group | U98 |
|-------------|-----|

Ordering information

| Item number | Item description | Available as assembly only |
|-------------|------------------|----------------------------|
| 22511416 | SUCOFLEX_106_D | Yes |

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

| | | | |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|
| a coefficient typical = | 0.15 | b coefficient typical = | 0.0071 |
| fmax = | 18.0 | P at 1 GHz = | 1582.0 |
| 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 |
| 0.20 | 0.069 | 0.021 | 3537 |
| 0.40 | 0.098 | 0.030 | 2501 |
| 0.60 | 0.120 | 0.037 | 2042 |
| 0.80 | 0.140 | 0.043 | 1769 |
| 1.00 | 0.157 | 0.048 | 1582 |
| 1.20 | 0.173 | 0.053 | 1444 |
| 1.40 | 0.187 | 0.057 | 1337 |
| 1.60 | 0.201 | 0.061 | 1251 |
| 1.80 | 0.214 | 0.065 | 1179 |
| 2.00 | 0.226 | 0.069 | 1119 |
| 4.00 | 0.328 | 0.100 | 791 |
| 6.00 | 0.410 | 0.125 | 646 |
| 8.00 | 0.481 | 0.147 | 559 |
| 10.00 | 0.545 | 0.166 | 500 |
| 18.00 | 0.764 | 0.233 | 373 |

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