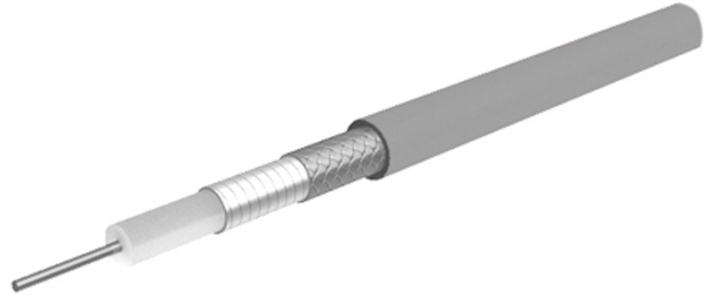


Flexible microwave cable MULTIFLEX_318_CT

Description

Multiflex: Flexible alternatives to semi-rigid microwave cables

50 Ohm, 18 GHz, 200°C, ø6.93mm, FEP jacket



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|---------------------------------------|--------------------|-----------------|
| Centre conductor | Aluminium, Copper clad, Silver plated | Wire | |
| Dielectric | Low density fluorine polymer | | |
| Outer conductor | Copper, Silver plated | wrapped Foil, 100% | |
| Outer conductor | Copper, Silver plated | Braid, 81 % | |
| Jacket | FEP (Fluorinated ethylene propylene) | RAL 5015 - bl | 7.5 mm +/- 0.15 |

Print: HUBER+SUHNER MULTIFLEX 318 CT 50 Ohm (PA no.)

Electrical Data

| | |
|--------------------------------|---|
| Impedance | 50 Ω +/- 2 |
| Operating Frequency | 18 GHz |
| Capacitance | 80 pF/m |
| Velocity of signal propagation | 84 % |
| Signal delay | 4 ns/m |
| Screening effectiveness | ≥ 90 dB (up to 18 GHz) |
| Operating voltage | ≤ 1.35 kV _{rms} (at sea level) |
| Test voltage | 3 kV _{rms} (50 Hz/1 min) |
| Phase vs Temperature | -55°C... + 125°C 500 ppm |

Mechanical Data

| | |
|---------------------|-------------------------------|
| Weight | 9 kg/100 m |
| Min. bending radius | static repeated dynamic |
| | 42.5 mm 80 mm |

Environmental Data

| | |
|--------------------------|---------------------------|
| Temperature range | -65 °C ... +200 °C |
| Installation temperature | -20 °C... +60 °C |
| Halogen free | No |
| 2011/65/EU (RoHS) | compliant |
| 2006/1907/EC (REACH) | compliant |
| 2000/53/EC (ELV) | compliant |
| 2012/19/EU (WEEE) | no special marking needed |

Additional Information

Ordering Information

Order as MULTIFLEX_318_CT (available only as assembly)

Remarks

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

Suitable Connectors

Cable group Y29 6mm / 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 = 0.15

b = 0.02

f_{max} = 18

P at 1GHz = 1350

| 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 |
|--------------------|---|--|---|
| 0,9 | 0,16 | 0,049 | 1423 |
| 1,8 | 0,24 | 0,072 | 1006 |
| 2,7 | 0,3 | 0,092 | 822 |
| 3,6 | 0,36 | 0,109 | 712 |
| 4,5 | 0,41 | 0,124 | 636 |
| 5,4 | 0,46 | 0,139 | 581 |
| 6,3 | 0,5 | 0,153 | 538 |
| 7,2 | 0,55 | 0,167 | 503 |
| 8,1 | 0,59 | 0,179 | 474 |
| 9,0 | 0,63 | 0,192 | 450 |
| 9,9 | 0,67 | 0,204 | 429 |
| 10,8 | 0,71 | 0,216 | 411 |
| 11,7 | 0,75 | 0,228 | 395 |
| 12,6 | 0,78 | 0,239 | 380 |
| 13,5 | 0,82 | 0,250 | 367 |
| 14,4 | 0,86 | 0,261 | 356 |
| 15,3 | 0,89 | 0,272 | 345 |
| 16,2 | 0,93 | 0,283 | 335 |
| 17,1 | 0,96 | 0,293 | 326 |
| 18,0 | 1,0 | 0,304 | 318 |