

Flexible RF cable

G_03212-01 Item: 22610095

Description

G: RF cables with PE dielectrics

RG58 alternative, 50 Ohm, 1 GHz, 85°C, ø4.95 mm, PUR jacket



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--------------------|---------------|------------------|
| Centre conductor | Copper, Tin plated | Strand-19 | 0.902 mm |
| Dielectric | PE (Polyethylene) | | 2.95 mm |
| Outer conductor | Copper, Tin plated | Braid, 95% | 3.6 mm |
| Jacket | PUR (Polyurethane) | RAL 9005 - bk | 4.95 mm +/- 0.15 |

Print: No print on jacket

Electrical Data

| | |
|--------------------------------|--|
| Impedance | 50 Ω +/- 2 |
| Operating Frequency | 1 GHz |
| Capacitance | 101 pF/m |
| Velocity of signal propagation | 66 % |
| Signal delay | 5.03 ns/m |
| Screening effectiveness | ≥ 40 dB (up to 1 GHz) |
| Operating voltage | ≤ 2.5 kV _{rms} (at sea level) |
| Test voltage | 5 kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|--------|----------------|
| Weight | | 3.6 kg/100 m |
| Min. bending radius | static | 25 mm 50 mm |

Environmental Data

| | |
|--|-------------------|
| Temperature range | -40 °C ... +85 °C |
| Installation temperature | -20 °C... +60 °C |
| Halogen test | IEC 60754 |
| Halogen free | Yes |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant |
| 1907/2006/EC (REACH) | compliant |

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 | U7 3 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 = 0.4629

b = 0.1012

$f_{\max} = 1$

P at 1GHz = 110

| 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 |
|--------------------|---|--|---|
| 0,05 | 0,11 | 0,033 | 492 |
| 0,1 | 0,16 | 0,048 | 348 |
| 0,15 | 0,19 | 0,059 | 284 |
| 0,2 | 0,23 | 0,069 | 246 |
| 0,25 | 0,26 | 0,078 | 220 |
| 0,3 | 0,28 | 0,087 | 201 |
| 0,35 | 0,31 | 0,094 | 186 |
| 0,4 | 0,33 | 0,102 | 174 |
| 0,45 | 0,36 | 0,109 | 164 |
| 0,5 | 0,38 | 0,115 | 156 |
| 0,55 | 0,4 | 0,122 | 148 |
| 0,6 | 0,42 | 0,128 | 142 |
| 0,65 | 0,44 | 0,134 | 136 |
| 0,7 | 0,46 | 0,140 | 131 |
| 0,75 | 0,48 | 0,145 | 127 |
| 0,8 | 0,49 | 0,151 | 123 |
| 0,85 | 0,51 | 0,156 | 119 |
| 0,9 | 0,53 | 0,162 | 116 |
| 0,95 | 0,55 | 0,167 | 113 |
| 1,0 | 0,56 | 0,172 | 110 |