

## Flexible RF cable G\_04233\_D-01

### Description

G: RF cables with PE dielectrics

RG59D/RD59 High-flexible alternative, 75 Ohm, 2 GHz, 85°C,  
ø6.7 mm, PVC jacket



### Technical Data

#### Construction

|                  | Material                 | Detail        | Diameter        |
|------------------|--------------------------|---------------|-----------------|
| Centre conductor | Copper                   | Strand-07     | 0.64 mm         |
| Dielectric       | PE (Polyethylene)        |               | 3.75 mm         |
| Outer conductor  | Copper, Tin plated       | Braid, 93%    | 4.35 mm         |
| Outer conductor  | Copper, Tin plated       | Braid, 92 %   | 5 mm            |
| Jacket           | PVC (Polyvinyl chloride) | RAL 9005 - bk | 6.7 mm +/- 0.15 |

Print: HUBER+SUHNER G 04233 D-01 75 Ohm (PA no.)

#### Electrical Data

|                                |                                      |
|--------------------------------|--------------------------------------|
| Impedance                      | 75 Ω +/- 1.5                         |
| Operating Frequency            | 2 GHz                                |
| Capacitance                    | 67 pF/m                              |
| Velocity of signal propagation | 66 %                                 |
| Signal delay                   | 5.07 ns/m                            |
| Insulation resistance          | ≥ 1 x 10 <sup>8</sup> MΩm            |
| Max. operating voltage         | ≤ 3 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 6 kV <sub>rms</sub> (50 Hz/1 min)    |

#### Mechanical Data

|                     |                              |              |
|---------------------|------------------------------|--------------|
| Weight              |                              | 7.4 kg/100 m |
| Min. bending radius | static                       | 35 mm        |
|                     | repeated (for ≤ 50 bendings) | 67 mm        |

#### Environmental Data

|                          |                  |
|--------------------------|------------------|
| Temperature range        | -25 °C... +85 °C |
| Installation temperature | -20 °C... +60 °C |
| 2011/65/EU (RoHS)        | compliant        |

### Additional Information

#### Ordering Information

Order as G\_04233\_D-01

#### Remarks

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

#### Suitable Connectors

Cable group U18 4 mm / 75 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 = 0.38

b = 0.0829

$f_{\max} = 2$

P at 1GHz = 130

| Frequency<br>(GHz) | Nom. attenuation<br>(dB / m)<br>sea level 25° C<br>ambient<br>temperature | Nom. attenuation<br>(dB / ft)<br>sea level 25° C<br>ambient<br>temperature | Max. CW power<br>(watt)<br>sea level 40° C<br>ambient<br>temperature |
|--------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| 0,1                | 0,13                                                                      | 0,039                                                                      | 411                                                                  |
| 0,2                | 0,19                                                                      | 0,057                                                                      | 291                                                                  |
| 0,3                | 0,23                                                                      | 0,071                                                                      | 237                                                                  |
| 0,4                | 0,27                                                                      | 0,083                                                                      | 206                                                                  |
| 0,5                | 0,31                                                                      | 0,095                                                                      | 184                                                                  |
| 0,6                | 0,34                                                                      | 0,105                                                                      | 168                                                                  |
| 0,7                | 0,38                                                                      | 0,115                                                                      | 155                                                                  |
| 0,8                | 0,41                                                                      | 0,124                                                                      | 145                                                                  |
| 0,9                | 0,44                                                                      | 0,133                                                                      | 137                                                                  |
| 1,0                | 0,46                                                                      | 0,141                                                                      | 130                                                                  |
| 1,1                | 0,49                                                                      | 0,149                                                                      | 124                                                                  |
| 1,2                | 0,52                                                                      | 0,157                                                                      | 119                                                                  |
| 1,3                | 0,54                                                                      | 0,165                                                                      | 114                                                                  |
| 1,4                | 0,57                                                                      | 0,172                                                                      | 110                                                                  |
| 1,5                | 0,59                                                                      | 0,180                                                                      | 106                                                                  |
| 1,6                | 0,61                                                                      | 0,187                                                                      | 103                                                                  |
| 1,7                | 0,64                                                                      | 0,194                                                                      | 100                                                                  |
| 1,8                | 0,66                                                                      | 0,201                                                                      | 97                                                                   |
| 1,9                | 0,68                                                                      | 0,208                                                                      | 94                                                                   |
| 2,0                | 0,7                                                                       | 0,214                                                                      | 92                                                                   |