

## Coaxial Cable G\_02212\_D-02

### Description

PE-50 Ohm - double screen



### Technical Data

#### Construction

|                  | Material                    | Detail        | Diameter       |
|------------------|-----------------------------|---------------|----------------|
| Centre conductor | Copper, Silver plated       | Strand-07     | 0.48 mm        |
| Dielectric       | PE (Polyethylene)           |               | 1.5 mm         |
| Outer conductor  | Copper, Silver plated       | Braid, 95%    | 2 mm           |
| Outer conductor  | Steel, Copper+Silver plated | Braid, 93 %   | 2.5 mm         |
| Jacket           | PUR (Polyurethane)          | RAL 2001 - or | 3.1 mm +/- 0.1 |

Print: HUBER+SUHNER G 02212 D-02 50 Ohm (PA no.)

#### Electrical Data

|                                |                                        |
|--------------------------------|----------------------------------------|
| Impedance                      | 50 Ω +/- 2                             |
| Operating Frequency            | 6 GHz                                  |
| Capacitance                    | 100 pF/m                               |
| Velocity of signal propagation | 66 %                                   |
| Signal delay                   | 5.03 ns/m                              |
| Insulation resistance          | ≥ 1 x 10 <sup>8</sup> MΩm              |
| Min. screening effectiveness   | ≥ 80 dB (up to 1 GHz)                  |
| Max. operating voltage         | ≤ 1.5 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 3 kV <sub>rms</sub> (50 Hz/1 min)      |

#### Mechanical Data

|                     |                                       |
|---------------------|---------------------------------------|
| Weight              | 1.8 kg/100 m                          |
| Min. bending radius | static<br>15 mm                       |
|                     | repeated (for ≤ 50 bendings)<br>30 mm |

#### Environmental Data

|                          |                  |
|--------------------------|------------------|
| Temperature range        | -40 °C... +85 °C |
| Installation temperature | -20 °C... +60 °C |
| Halogen test             | IEC 60754        |
| 2011/65/EU (RoHS)        | compliant        |

### Additional Information

#### Ordering Information

Order as G\_02212\_D-02

#### Remarks

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

#### Suitable Connectors

Cable group U4 2 mm / 50 Ohm

## Coaxial Cable G\_02212\_D-02

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

Coefficients:

a = 0.95

b = 0.125

f<sub>max</sub> = 6

P at 1GHz = 37

| 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 |
|--------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| 0,3                | 0,56                                                                      | 0,170                                                                      | 68                                                                   |
| 0,6                | 0,81                                                                      | 0,247                                                                      | 48                                                                   |
| 0,9                | 1,01                                                                      | 0,309                                                                      | 39                                                                   |
| 1,2                | 1,19                                                                      | 0,363                                                                      | 34                                                                   |
| 1,5                | 1,35                                                                      | 0,412                                                                      | 30                                                                   |
| 1,8                | 1,5                                                                       | 0,457                                                                      | 28                                                                   |
| 2,1                | 1,64                                                                      | 0,500                                                                      | 26                                                                   |
| 2,4                | 1,77                                                                      | 0,540                                                                      | 24                                                                   |
| 2,7                | 1,9                                                                       | 0,579                                                                      | 23                                                                   |
| 3,0                | 2,02                                                                      | 0,616                                                                      | 21                                                                   |
| 3,3                | 2,14                                                                      | 0,652                                                                      | 20                                                                   |
| 3,6                | 2,25                                                                      | 0,687                                                                      | 20                                                                   |
| 3,9                | 2,36                                                                      | 0,720                                                                      | 19                                                                   |
| 4,2                | 2,47                                                                      | 0,753                                                                      | 18                                                                   |
| 4,5                | 2,58                                                                      | 0,786                                                                      | 17                                                                   |
| 4,8                | 2,68                                                                      | 0,817                                                                      | 17                                                                   |
| 5,1                | 2,78                                                                      | 0,848                                                                      | 16                                                                   |
| 5,4                | 2,88                                                                      | 0,879                                                                      | 16                                                                   |
| 5,7                | 2,98                                                                      | 0,908                                                                      | 15                                                                   |
| 6,0                | 3,08                                                                      | 0,938                                                                      | 15                                                                   |