

## Coaxial Cable G\_05232

### Description

PE-50 Ohm - single screen



### Technical Data

#### Construction

|                  | Material               | Detail        | Diameter        |
|------------------|------------------------|---------------|-----------------|
| Centre conductor | Copper                 | Strand-07     | 1.5 mm          |
| Dielectric       | PE (Polyethylene)      |               | 4.8 mm          |
| Outer conductor  | Copper                 | Braid, 92%    | 5.6 mm          |
| Jacket           | PVC II (low migration) | RAL 9005 - bk | 7.4 mm +/- 0.15 |

Print: HUBER+SUHNER G 05232 50 Ohm (PA no.)

#### Electrical Data

|                                |                                             |
|--------------------------------|---------------------------------------------|
| Impedance                      | 50 $\Omega$ +/- 2                           |
| Operating Frequency            | 1 GHz                                       |
| Capacitance                    | 101 pF/m                                    |
| Velocity of signal propagation | 66 %                                        |
| Signal delay                   | 5.03 ns/m                                   |
| Insulation resistance          | $\geq 1 \times 10^8$ MQm                    |
| Min. screening effectiveness   | $\geq 40$ dB (up to 1 GHz)                  |
| Max. operating voltage         | $\leq 3.5$ kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 7 kV <sub>rms</sub> (50 Hz/1 min)           |

#### Mechanical Data

|                     |                                            |
|---------------------|--------------------------------------------|
| Weight              | 7.7 kg/100 m                               |
| Min. bending radius | static<br>40 mm                            |
|                     | repeated (for $\leq 50$ bendings)<br>75 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_05232 |
|----------|---------|

#### Remarks

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

#### Suitable Connectors

|             |                   |
|-------------|-------------------|
| Cable group | U19 5 mm / 50 Ohm |
|-------------|-------------------|

## Coaxial Cable G\_05232

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

Coefficients:

a = 0.2672

b = 0.0757

f<sub>max</sub> = 1

P at 1GHz = 211

| 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 |
|--------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| 0,05               | 0,06                                                                      | 0,019                                                                      | 944                                                                  |
| 0,1                | 0,09                                                                      | 0,028                                                                      | 667                                                                  |
| 0,15               | 0,11                                                                      | 0,035                                                                      | 545                                                                  |
| 0,2                | 0,13                                                                      | 0,041                                                                      | 472                                                                  |
| 0,25               | 0,15                                                                      | 0,046                                                                      | 422                                                                  |
| 0,3                | 0,17                                                                      | 0,052                                                                      | 385                                                                  |
| 0,35               | 0,18                                                                      | 0,056                                                                      | 357                                                                  |
| 0,4                | 0,2                                                                       | 0,061                                                                      | 334                                                                  |
| 0,45               | 0,21                                                                      | 0,065                                                                      | 315                                                                  |
| 0,5                | 0,23                                                                      | 0,069                                                                      | 298                                                                  |
| 0,55               | 0,24                                                                      | 0,073                                                                      | 285                                                                  |
| 0,6                | 0,25                                                                      | 0,077                                                                      | 272                                                                  |
| 0,65               | 0,26                                                                      | 0,081                                                                      | 262                                                                  |
| 0,7                | 0,28                                                                      | 0,084                                                                      | 252                                                                  |
| 0,75               | 0,29                                                                      | 0,088                                                                      | 244                                                                  |
| 0,8                | 0,3                                                                       | 0,091                                                                      | 236                                                                  |
| 0,85               | 0,31                                                                      | 0,095                                                                      | 229                                                                  |
| 0,9                | 0,32                                                                      | 0,098                                                                      | 222                                                                  |
| 0,95               | 0,33                                                                      | 0,101                                                                      | 216                                                                  |
| 1,0                | 0,34                                                                      | 0,105                                                                      | 211                                                                  |