

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_223_/U-02



Description

PE-50 Ohm - double screen

Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--|---------------|-----------------|
| Centre conductor | Copper, Silver plated | Strand-19 | 0.9 mm |
| Dielectric | PE | | 2.93 mm |
| Outer conductor | Copper, Silver plated | Braid, 96 % | 3.6 mm |
| Outer conductor | Copper, Silver plated | Braid, 94 % | 4.2 mm |
| Jacket | PVC II (low migration) | RAL 9005 - bk | 5.3 mm +/- 0.15 |
| Print | HUBER+SUHNER RG 223 U-02 50 Ohm (PA no.) | | |

Electrical Data

| | | |
|--------------------------------|-----------------|----------------------------------|
| Impedance | 50 | Ω +/- 2 |
| Max. operating frequency | 6 | GHz |
| Capacitance | 101 | pF/m |
| Velocity of signal propagation | 66 | % |
| Signal delay | 5.03 | ns/m |
| Insulation resistance | $\geq 1 \times$ | $10^8 \text{ M}\Omega\text{m}$ |
| Min. screening effectiveness | >83 | dB (up to 1 GHz) |
| Max. operating voltage | 2.5 | kV _{rms} (at sea level) |
| Test voltage | 5 | kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|---------------------------------|----------|
| Weight | 5.3 | kg/100 m |
| Min. bending radius | static | 26 mm |
| | repeated (for max. 50 bendings) | 50 mm |

Environmental Data

| | |
|--------------------------|-------------------|
| Temperature range | -25 °C... + 85 °C |
| Installation temperature | -20 °C... + 60 °C |
| 2002/95/EC (RoHS) | compliant |

Ordering Information

Order as RG_223_/U-02

Additional Information

Remarks

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

Cable group U9 3 mm / 50 Ohm

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Rev.: H

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

Coefficients:

| | | | | | | | |
|----|------------------|----|---|---------------------|---|---------------------------|---|
| a= | 0.501 | b= | 0.067 | f _{max.} = | 6 | p _{at} 1GHz = | 120 |
| | | | | | | | |
| | Frequency | | Nom. attenuation | | Nom. attenuation | | Max. CW power |
| | (GHz) | | (dB / m) | | (dB / ft) | | (watt) |
| | | | sea level 25° C ambient temperature | | sea level 25° C ambient temperature | | sea level 40° C ambient temperature |
| | | | | | | | |
| | 0.3 | | 0.29 | | 0.088 | | 219 |
| | 0.6 | | 0.43 | | 0.131 | | 155 |
| | 0.9 | | 0.54 | | 0.165 | | 126 |
| | 1.2 | | 0.63 | | 0.192 | | 110 |
| | 1.5 | | 0.71 | | 0.216 | | 98 |
| | 1.8 | | 0.79 | | 0.241 | | 89 |
| | 2.1 | | 0.87 | | 0.265 | | 83 |
| | 2.4 | | 0.94 | | 0.286 | | 77 |
| | 2.7 | | 1.00 | | 0.305 | | 73 |
| | 3.0 | | 1.07 | | 0.326 | | 69 |
| | 3.3 | | 1.13 | | 0.344 | | 66 |
| | 3.6 | | 1.19 | | 0.363 | | 63 |
| | 3.9 | | 1.25 | | 0.381 | | 61 |
| | 4.2 | | 1.31 | | 0.399 | | 59 |
| | 4.5 | | 1.36 | | 0.415 | | 57 |
| | 4.8 | | 1.42 | | 0.433 | | 55 |
| | 5.1 | | 1.47 | | 0.448 | | 53 |
| | 5.4 | | 1.53 | | 0.466 | | 52 |
| | 5.7 | | 1.58 | | 0.482 | | 50 |
| | 6.0 | | 1.63 | | 0.497 | | 49 |

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER!

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