

Coaxial Cable RG_223_/U-60

Description

PE-50 Ohm - double screen (UL AWM Style 1354)



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--------------------------|---------------|----------------|
| Centre conductor | Copper, Silver plated | Wire | 0.88 mm |
| Dielectric | PE (Polyethylene) | | 2.95 mm |
| Outer conductor | Copper, Tin plated | Braid, 96% | 3.6 mm |
| Outer conductor | Copper, Tin plated | Braid, 94 % | 4.2 mm |
| Jacket | PVC (Polyvinyl chloride) | RAL 7032 - gr | 5.4 mm +/- 0.1 |

Print: HUBER+SUHNER RG 223 U-60 50 Ohm (UL logo) AWM Style 1354 (PA no.)

Electrical Data

| | |
|--------------------------------|--|
| Impedance | 50 Ω +/- 2 |
| Operating Frequency | 6 GHz |
| Capacitance | 101 pF/m |
| Velocity of signal propagation | 66 % |
| Signal delay | 5.03 ns/m |
| Insulation resistance | ≥ 1 x 10 ⁸ MQm |
| Min. screening effectiveness | ≥ 85 dB (up to 6 GHz) |
| Max. operating voltage | ≤ 2.5 kV _{rms} (at sea level) |
| Test voltage | 5 kV _{rms} (50 Hz/1 min) |
| Voltage Rating UL | 30 V |

Mechanical Data

| | |
|---------------------|---------------------------------------|
| Weight | 5.5 kg/100 m |
| Min. bending radius | static 30 mm |
| | repeated (for ≤ 50 bendings) 54 mm |

Environmental Data

| | |
|--------------------------|-------------------------------|
| Temperature range | -25 °C... +85 °C |
| Temperature Rating UL | 60 °C |
| Installation temperature | -20 °C... +60 °C |
| Flammability | UL (horizontal flame test), , |
| 2011/95/EC (RoHS) | compliant |

Additional Information

Ordering Information

Order as RG_223_/U-60

Remarks

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

Suitable Connectors

Cable group U9 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 = 0.3935

b = 0.0841

f_{max} = 6

P at 1GHz = 120

| 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 (watt) sea level 40° C ambient temperature |
|--------------------|---|--|--|
| 0.3 | 0.24 | 0.073 | 219 |
| 0.6 | 0.36 | 0.108 | 155 |
| 0.9 | 0.45 | 0.137 | 126 |
| 1.2 | 0.53 | 0.162 | 110 |
| 1.5 | 0.61 | 0.185 | 98 |
| 1.8 | 0.68 | 0.207 | 89 |
| 2.1 | 0.75 | 0.228 | 83 |
| 2.4 | 0.81 | 0.247 | 77 |
| 2.7 | 0.87 | 0.266 | 73 |
| 3.0 | 0.93 | 0.285 | 69 |
| 3.3 | 0.99 | 0.302 | 66 |
| 3.6 | 1.05 | 0.320 | 63 |
| 3.9 | 1.11 | 0.337 | 61 |
| 4.2 | 1.16 | 0.353 | 59 |
| 4.5 | 1.21 | 0.370 | 57 |
| 4.8 | 1.27 | 0.386 | 55 |
| 5.1 | 1.32 | 0.402 | 53 |
| 5.4 | 1.37 | 0.417 | 52 |
| 5.7 | 1.42 | 0.432 | 50 |
| 6.0 | 1.47 | 0.448 | 49 |