

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SPUMA_195



Description

PE Foam - 50 Ohm - double screened

Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--|--------------------------|------------------|
| Centre conductor | Copper | Wire | 0.94 mm |
| Dielectric | SPE (Foamed Polyethylene) | | 2.79 mm |
| Outer conductor | Aluminum / PES | longitudinal Foil, 100 % | 2.95 mm |
| Outer conductor | Copper, Tin plated | Braid, 89 % | 3.53 mm |
| Jacket | PE (Polyethylene) | RAL 9005 - bk | 4.95 mm +/- 0.13 |
| Print | HUBER+SUHNER SPUMA 195 50 Ohm (PA no.) | | |

Electrical Data

| | | |
|--------------------------------|----------------------|----------------------------------|
| Impedance | 50 | Ω +/- 2 |
| Max. operating frequency | 6 | GHz |
| Capacitance | 83 | pF/m |
| Velocity of signal propagation | 80 | % |
| Signal delay | 4.17 | ns/m |
| Insulation resistance | $\geq 1 \times 10^8$ | M Ω m |
| Min. screening effectiveness | > 90 | dB (up to 6 GHz) |
| Max. operating voltage | 0.75 | kV _{rms} (at sea level) |
| Test voltage | 1.5 | kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|---------------------------------|----------|
| Weight | 3 | kg/100 m |
| Min. bending radius | static | 12.5 mm |
| | repeated (for max. 50 bendings) | 50 mm |

Environmental Data

| | |
|--------------------------|-------------------|
| Temperature range | -40 °C... + 85 °C |
| Installation temperature | -20 °C... + 60 °C |
| Halogen free | IEC 60754 |
| 2002/95/EC (RoHS) | compliant |

Ordering Information

Order as SPUMA_195

Additional Information

Remarks

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

Cable group X27 3 mm / 50 Ohm

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Rev.: A

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

Coefficients:

| | | | | | | | |
|----|------------------|----|---|---------------------|---|---------------------------|---|
| a= | 0.3704 | b= | 0.0154 | f _{max.} = | 6 | p _{at} 1GHz = | 160 |
| | | | | | | | |
| | 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 | | 0.21 | | 0.064 | | 292 |
| | 0.6 | | 0.30 | | 0.091 | | 207 |
| | 0.9 | | 0.37 | | 0.113 | | 169 |
| | 1.2 | | 0.42 | | 0.128 | | 146 |
| | 1.5 | | 0.48 | | 0.146 | | 131 |
| | 1.8 | | 0.52 | | 0.158 | | 119 |
| | 2.1 | | 0.57 | | 0.174 | | 110 |
| | 2.4 | | 0.61 | | 0.186 | | 103 |
| | 2.7 | | 0.65 | | 0.198 | | 97 |
| | 3.0 | | 0.69 | | 0.210 | | 92 |
| | 3.3 | | 0.72 | | 0.219 | | 88 |
| | 3.6 | | 0.76 | | 0.232 | | 84 |
| | 3.9 | | 0.79 | | 0.241 | | 81 |
| | 4.2 | | 0.82 | | 0.250 | | 78 |
| | 4.5 | | 0.86 | | 0.262 | | 75 |
| | 4.8 | | 0.89 | | 0.271 | | 73 |
| | 5.1 | | 0.92 | | 0.280 | | 71 |
| | 5.4 | | 0.94 | | 0.286 | | 69 |
| | 5.7 | | 0.97 | | 0.296 | | 67 |
| | 6.0 | | 1.00 | | 0.305 | | 65 |

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

WAIVER!

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