

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SPUMA_600



Description

PE Foam - 50 Ohm - double screened

Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--|--------------------------|-------------------|
| Centre conductor | Aluminium / Copper | Wire | 4.44 mm |
| Dielectric | SPE (Foamed Polyethylene) | | 11.56 mm |
| Outer conductor | Aluminum / PES | longitudinal Foil, 100 % | 11.71 mm |
| Outer conductor | Copper, Tin plated | Braid, 78 % | 12.55 mm |
| Jacket | PE (Polyethylene) | RAL 9005 - bk | 14.99 mm +/- 0.25 |
| Print | HUBER+SUHNER SPUMA 600 50 Ohm (PA no.) | | |

Electrical Data

| | | |
|--------------------------------|----------------------|----------------------------------|
| Impedance | 50 | Ω +/- 2 |
| Max. operating frequency | 6 | GHz |
| Capacitance | 78 | pF/m |
| Velocity of signal propagation | 85 | % |
| Signal delay | 3.9 | ns/m |
| Insulation resistance | $\geq 1 \times 10^8$ | M Ω m |
| Min. screening effectiveness | > 90 | dB (up to 6 GHz) |
| Max. operating voltage | 2 | kV _{rms} (at sea level) |
| Test voltage | 4 | kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|---------------------------------|----------|
| Weight | 20 | kg/100 m |
| Min. bending radius | static | 38 mm |
| | repeated (for max. 50 bendings) | 152 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_600

Additional Information

Remarks

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

Cable group X29 12 mm / 50 Ohm

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SPUMA_600



Rev.: A.00

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

Coefficients:

| | | | | | | | |
|----|------------------|----|---|--------------------|---|---------------------------|---|
| a= | 0.0786 | b= | 0.008 | f _{max} = | 6 | p _{at} 1GHz = | 930 |
| | | | | | | | |
| | 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 | | 0.05 | | 0.015 | | 1698 |
| | 0.6 | | 0.07 | | 0.021 | | 1201 |
| | 0.9 | | 0.08 | | 0.024 | | 980 |
| | 1.2 | | 0.10 | | 0.030 | | 849 |
| | 1.5 | | 0.11 | | 0.034 | | 759 |
| | 1.8 | | 0.12 | | 0.037 | | 693 |
| | 2.1 | | 0.13 | | 0.040 | | 642 |
| | 2.4 | | 0.14 | | 0.043 | | 600 |
| | 2.7 | | 0.15 | | 0.046 | | 566 |
| | 3.0 | | 0.16 | | 0.049 | | 537 |
| | 3.3 | | 0.17 | | 0.052 | | 512 |
| | 3.6 | | 0.18 | | 0.055 | | 490 |
| | 3.9 | | 0.19 | | 0.058 | | 471 |
| | 4.2 | | 0.19 | | 0.058 | | 454 |
| | 4.5 | | 0.20 | | 0.061 | | 438 |
| | 4.8 | | 0.21 | | 0.064 | | 424 |
| | 5.1 | | 0.22 | | 0.067 | | 412 |
| | 5.4 | | 0.23 | | 0.070 | | 400 |
| | 5.7 | | 0.23 | | 0.070 | | 390 |
| | 6.0 | | 0.24 | | 0.073 | | 380 |

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

WAIVER!

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



HUBER+SUHNER AG
RF Industrial
9100 Herisau, Switzerland
 Phone +41 (0)71 353 41 11
 Fax +41 (0)71 353 45 90
 www.hubersuhner.com

HUBER+SUHNER – Excellence in Connectivity Solutions