

HUBER+SUHNER® DATA SHEET

Coaxial Cable: S_07162_B



Description

PE Foam - 50 Ohm - double screened

Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|---|--------------------------|-----------------|
| Centre conductor | Aluminium / Copper | Wire | 2.74 mm |
| Dielectric | SPE (Foamed Polyethylene) | | 7.2 mm |
| Outer conductor | Aluminum / PES | longitudinal Foil, 100 % | 7.45 mm |
| Outer conductor | Copper, Tin plated | Braid, 88 % | 8.2 mm |
| Jacket | LSFH (modified polyethylene) | RAL 9005 - bk | 10.3 mm +/- 0.1 |
| Print | HUBER+SUHNER S 07162 B 50 Ohm (PA no.) (numbered by meters) | | |

Electrical Data

| | | |
|--------------------------------|----------------------|----------------------------------|
| Impedance | 50 | Ω +/- 2 |
| Max. operating frequency | 6 | GHz |
| Capacitance | 75 | pF/m |
| Velocity of signal propagation | 88 | % |
| Signal delay | 3.8 | ns/m |
| Insulation resistance | $\geq 1 \times 10^8$ | M Ω m |
| Max. operating voltage | 1.05 | kV _{rms} (at sea level) |
| Test voltage | 2.1 | kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|---------------------------------|----------|
| Weight | 11.4 | kg/100 m |
| Min. bending radius | static | 110 mm |
| | repeated (for max. 50 bendings) | 165 mm |

Environmental Data

| | |
|--------------------------|-------------------|
| Temperature range | -40 °C... + 85 °C |
| Installation temperature | -20 °C... + 60 °C |
| Flammability | IEC 60332-1 |
| Halogen free | IEC 60754 |
| 2002/95/EC (RoHS) | compliant |

Ordering Information

Order as S_07162_B

Additional Information

Remarks

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

Suitable Connectors

| | |
|-------------|---------------|
| Cable group | crimped (U30) |
| | clamped (U31) |
| | soldered — |

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

Coefficients:

| | | | | | | | |
|----|------------------|----|---|---------------------|---|---------------------------|---|
| a= | 0.1256 | b= | 0.0264 | f _{max.} = | 6 | p _{at} 1GHz = | 410 |
| | | | | | | | |
| | 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 | | 0.08 | | 0.024 | | 749 |
| | 0.6 | | 0.11 | | 0.034 | | 529 |
| | 0.9 | | 0.14 | | 0.043 | | 432 |
| | 1.2 | | 0.17 | | 0.052 | | 374 |
| | 1.5 | | 0.19 | | 0.058 | | 335 |
| | 1.8 | | 0.22 | | 0.067 | | 306 |
| | 2.1 | | 0.24 | | 0.073 | | 283 |
| | 2.4 | | 0.26 | | 0.079 | | 265 |
| | 2.7 | | 0.28 | | 0.085 | | 250 |
| | 3.0 | | 0.30 | | 0.091 | | 237 |
| | 3.3 | | 0.32 | | 0.098 | | 226 |
| | 3.6 | | 0.33 | | 0.101 | | 216 |
| | 3.9 | | 0.35 | | 0.107 | | 208 |
| | 4.2 | | 0.37 | | 0.113 | | 200 |
| | 4.5 | | 0.39 | | 0.119 | | 193 |
| | 4.8 | | 0.40 | | 0.122 | | 187 |
| | 5.1 | | 0.42 | | 0.128 | | 182 |
| | 5.4 | | 0.43 | | 0.131 | | 176 |
| | 5.7 | | 0.45 | | 0.137 | | 172 |
| | 6.0 | | 0.47 | | 0.143 | | 167 |

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.



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