

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SUCOFLEX_106_P



Description

SUCOFLEX 100, the flexible, high performance microwave cable

Technical Data

Construction

| | Material | Detail | Diameter | |
|------------------|-----------------------|---------------------|----------|----|
| Centre conductor | Copper, Silver plated | Strand-19 | | |
| Dielectric | PTFE | | | |
| Outer conductor | Copper, Silver plated | wrapped Foil, 100 % | | |
| Outer conductor | Copper, Silver plated | Braid | | |
| Jacket | FEP | RAL 5000 - bl | 7.9 | mm |

Electrical Data

| | | |
|--------------------------------|------|----------------------------------|
| Impedance | 50 | Ω |
| Max. operating frequency | 18 | GHz |
| Capacitance | 87 | pF/m |
| Velocity of signal propagation | 77 | % |
| Signal delay | 4.3 | ns/m |
| Insulation resistance | ≥1 x | 10 ⁸ MΩm |
| Min. screening effectiveness | >90 | dB (up to 18 GHz) |
| Max. operating voltage | 3.2 | kV _{rms} (at sea level) |

Mechanical Data

| | | |
|---------------------|---------|----------|
| Weight | 15.8 | kg/100 m |
| Min. bending radius | static | 24 mm |
| | dynamic | 40 mm |

Environmental Data

| | |
|-----------------------------------|-------------------------------------|
| Temperature range | -55 °C... + 165 °C |
| Flammability 2002/95/EC (RoHS) | MIL-T-87104 - §4.6.4.8 compliant |

Ordering Information

Order as SUCOFLEX_106_P (available only as assembly)

Additional Information

Remarks

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

Suitable Connectors

| | |
|-------------|---------------|
| Cable group | crimped (n/a) |
| | clamped — |
| | 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= | 0.191 | b= | 0.0255 | f _{max.} = | 18 | p _{at} 1GHz = | 1383 |
| | | | | | | | |
| | 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 |
| | | | | | | | |
| | 0.9 | | 0.20 | | 0.061 | | 1458 |
| | 1.8 | | 0.30 | | 0.091 | | 1031 |
| | 2.7 | | 0.38 | | 0.116 | | 842 |
| | 3.6 | | 0.45 | | 0.137 | | 729 |
| | 4.5 | | 0.52 | | 0.158 | | 652 |
| | 5.4 | | 0.58 | | 0.177 | | 595 |
| | 6.3 | | 0.64 | | 0.195 | | 551 |
| | 7.2 | | 0.70 | | 0.213 | | 515 |
| | 8.1 | | 0.75 | | 0.229 | | 486 |
| | 9.0 | | 0.80 | | 0.244 | | 461 |
| | 9.9 | | 0.85 | | 0.259 | | 440 |
| | 10.8 | | 0.90 | | 0.274 | | 421 |
| | 11.7 | | 0.95 | | 0.290 | | 404 |
| | 12.6 | | 1.00 | | 0.305 | | 390 |
| | 13.5 | | 1.05 | | 0.320 | | 376 |
| | 14.4 | | 1.09 | | 0.332 | | 364 |
| | 15.3 | | 1.14 | | 0.347 | | 354 |
| | 16.2 | | 1.18 | | 0.360 | | 344 |
| | 17.1 | | 1.23 | | 0.375 | | 334 |
| | 18.0 | | 1.27 | | 0.387 | | 326 |

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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