

Coaxial Cable SUCOFORM_141_CU_FEP

Description

SUCOFORM, the handformable microwave cable with protective jacket



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|--------------------------------------|------------------------|----------------|
| Centre conductor | Copper, Silver plated | Wire | 0.95 mm |
| Dielectric | PTFE (Polytetrafluoroethylene) | | 2.95 mm |
| Outer conductor | Copper, Tin plated | Tin soaked braid, 100% | 3.58 mm |
| Jacket | FEP (Fluorinated ethylene propylene) | RAL 3020 - rd | 4.1 mm +/- 0.1 |

Print: HUBER+SUHNER SUCOFORM 141 Cu FEP 50 Ohm (PA no.)

Electrical Data

| | |
|--------------------------------|--|
| Impedance | 50 Ω +/- 2 |
| Operating Frequency | 33 GHz |
| Capacitance | 92 pF/m |
| Velocity of signal propagation | 71 % |
| Signal delay | 4.7 ns/m |
| Insulation resistance | ≥ 1 x 10 ⁸ MΩm |
| Min. screening effectiveness | ≥ 100 dB (up to 18 GHz) |
| Max. operating voltage | ≤ 1.9 kV _{rms} (at sea level) |
| Test voltage | 5 kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | |
|---------------------|--|
| Weight | 4.7 kg/100 m |
| Min. bending radius | static repeated (for ≤ 50 bendings) |
| | 8 mm 40 mm |

Environmental Data

| | |
|--------------------------|-------------------------------------|
| Temperature range | -65 °C... +165 °C |
| Installation temperature | -20 °C... +60 °C |
| Flammability | IEC 60332-1, UL 1581 § 1080 (VW-1), |
| 2011/95/EC (RoHS) | compliant |

Additional Information

Ordering Information

| | |
|----------|---------------------|
| Order as | SUCOFORM_141_CU_FEP |
|----------|---------------------|

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 | Y12 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 = 0.355

b = 0.04

$f_{max} = 33$

P at 1GHz = 560

| 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 |
|--------------------|---|--|--|
| 1.65 | 0.52 | 0.159 | 436 |
| 3.3 | 0.78 | 0.237 | 308 |
| 4.95 | 0.99 | 0.301 | 252 |
| 6.6 | 1.18 | 0.358 | 218 |
| 8.25 | 1.35 | 0.411 | 195 |
| 9.9 | 1.51 | 0.461 | 178 |
| 11.55 | 1.67 | 0.509 | 165 |
| 13.2 | 1.82 | 0.554 | 154 |
| 14.85 | 1.96 | 0.598 | 145 |
| 16.5 | 2.1 | 0.641 | 138 |
| 18.15 | 2.24 | 0.682 | 131 |
| 19.8 | 2.37 | 0.723 | 126 |
| 21.45 | 2.5 | 0.763 | 121 |
| 23.1 | 2.63 | 0.802 | 117 |
| 24.75 | 2.76 | 0.840 | 113 |
| 26.4 | 2.88 | 0.878 | 109 |
| 28.05 | 3.0 | 0.915 | 106 |
| 29.7 | 3.12 | 0.952 | 103 |
| 31.35 | 3.24 | 0.988 | 100 |
| 33.0 | 3.36 | 1.024 | 97 |