

Coaxial Cable SUCOFORM_250-01

Description

SUCOFORM, the handformable microwave cable



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.67 mm
Dielectric	PTFE (Polytetrafluoroethylene)		5.24 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 100%	6.3 mm

Print: HUBER+SUHNER SUCOFORM 250-01 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	18 GHz
Capacitance	95 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	≤ 3.5 kV _{rms} (at sea level)
Test voltage	7.5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		12.5 kg/100 m
Min. bending radius	static	30 mm
	repeated (for ≤ 50 bendings)	120 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_250-01

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 Y14 5 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 = 0.21

b = 0.031

f_{max} = 18

P at 1GHz = 920

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
0.9	0.23	0.069	970
1.8	0.34	0.103	686
2.7	0.43	0.131	560
3.6	0.51	0.155	485
4.5	0.58	0.178	434
5.4	0.66	0.200	396
6.3	0.72	0.220	367
7.2	0.79	0.240	343
8.1	0.85	0.259	323
9.0	0.91	0.277	307
9.9	0.97	0.295	292
10.8	1.02	0.312	280
11.7	1.08	0.329	269
12.6	1.14	0.346	259
13.5	1.19	0.363	250
14.4	1.24	0.379	242
15.3	1.3	0.395	235
16.2	1.35	0.411	229
17.1	1.4	0.426	222
18.0	1.45	0.442	217