

Coaxial Cable SUCOFORM_250-01_FEP

Description

SUCOFORM, the handformable microwave cable with protective jacket



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
Jacket	FEP (Fluorinated ethylene propylene)	RAL 3020 - rd	6.8 mm +/- 0.1

Print: HUBER+SUHNER SUCOFORM 250-01 FEP 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 ⁹ 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	13.8 kg/100 m
Min. bending radius	static 30 mm repeated (for ≤ 50 bendings) 120 mm

Environmental Data

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

Additional Information

Ordering Information

Order as	SUCOFORM_250-01_FEP
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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 = 1000

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	1054
1,8	0,34	0,103	745
2,7	0,43	0,131	609
3,6	0,51	0,155	527
4,5	0,58	0,178	471
5,4	0,66	0,200	430
6,3	0,72	0,220	398
7,2	0,79	0,240	373
8,1	0,85	0,259	351
9,0	0,91	0,277	333
9,9	0,97	0,295	318
10,8	1,02	0,312	304
11,7	1,08	0,329	292
12,6	1,14	0,346	282
13,5	1,19	0,363	272
14,4	1,24	0,379	264
15,3	1,3	0,395	256
16,2	1,35	0,411	248
17,1	1,4	0,426	242
18,0	1,45	0,442	236