Data Sheet

Coaxial Cable
SUCOFORM_86_FEP

Description

SUCOFORM, the handformable microwave cable with protective jacket

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.53 mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.65 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 100%	2.1 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 3027 - rd	2.5 mm +/- 0.1

Print: HUBER+SUHNER SUCOFORM 86 FEP 50 Ohm (Pa no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	40 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	≤ 1.5 kV_{rms} (at sea level)
Test voltage	3 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		1.8 kg/100 m
Min. bending radius	static	6 mm
	repeated (for ≤ 50 bendings)	20 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_86_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	Y16 2 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a = 0.6283	b = 0.04	f_{max} = 40	P at 1GHz = 280

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
2.0	0.97	0.295	198
4.0	1.42	0.432	140
6.0	1.78	0.542	114
8.0	2.1	0.639	99
10.0	2.39	0.727	89
12.0	2.66	0.810	81
14.0	2.91	0.887	75
16.0	3.15	0.961	70
18.0	3.39	1.032	66
20.0	3.61	1.100	63
22.0	3.83	1.166	60
24.0	4.04	1.231	57
26.0	4.24	1.293	55
28.0	4.44	1.355	53
30.0	4.64	1.415	51
32.0	4.83	1.473	49
34.0	5.02	1.531	48
36.0	5.21	1.588	47
38.0	5.39	1.644	45
40.0	5.57	1.699	44