

Formable microwave cable SUCOFORM_47_CU_LSFH

Description

Sucoform: Formstable, hand-formable alternatives to semi-rigid microwave cables

Non-magnetic, 50 Ohm, 40 GHz, 85°C, ø1.7 mm, LSFH jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.94 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 100%	1.19 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	1.7 mm

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 kV _{rms} (at sea level)
Test voltage	2 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	0.75 kg/100 m
Min. bending radius	static 4 mm

Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as	SUCOFORM_47_CU_LSFH
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Remarks

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

Suitable Connectors

Cable group	Y2 1 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 = 1.133

b = 0.0396

$f_{max} = 40$

P at 1GHz = 11

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	1.68	0.512	8
4.0	2.42	0.739	6
6.0	3.01	0.918	4
8.0	3.52	1.073	4
10.0	3.98	1.213	3
12.0	4.4	1.341	3
14.0	4.79	1.461	3
16.0	5.17	1.574	3
18.0	5.52	1.682	3
20.0	5.86	1.786	2
22.0	6.19	1.885	2
24.0	6.5	1.981	2
26.0	6.81	2.075	2
28.0	7.1	2.165	2
30.0	7.39	2.253	2
32.0	7.68	2.340	2
34.0	7.95	2.424	2
36.0	8.22	2.506	2
38.0	8.49	2.587	2
40.0	8.75	2.667	2