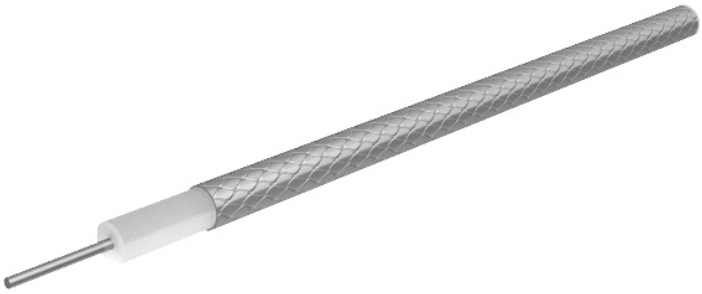
Data Sheet

Formable microwave cable SUCOFORM_47_CU

Description

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

Non-magnetic, 50 Ohm, 40 GHz, 165°C, ø1.19 mm, no 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

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		0.55 kg/100 m
Min. bending radius	static	3.18 mm

Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as	SUCOFORM_47_CU

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

a =	1.133	b =	0.0396	f_{max} =	40	P at 1GHz =	32

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(watt)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
2.0	1.68	0.512	23
4.0	2.42	0.739	16
6.0	3.01	0.918	13
8.0	3.52	1.073	11
10.0	3.98	1.213	10
12.0	4.4	1.341	9
14.0	4.79	1.461	9
16.0	5.17	1.574	8
18.0	5.52	1.682	8
20.0	5.86	1.786	7
22.0	6.19	1.885	7
24.0	6.5	1.981	7
26.0	6.81	2.075	6
28.0	7.1	2.165	6
30.0	7.39	2.253	6
32.0	7.68	2.340	6
34.0	7.95	2.424	5
36.0	8.22	2.506	5
38.0	8.49	2.587	5
40.0	8.75	2.667	5