

# Hand formable, 50 Ohm, 40 GHz, 85°C, ø1.7 mm, LSFH jacket

## SUCOFORM\_47\_CU\_LSFH

### Properties

- Hand-formable alternative to semi-rigid cables
- Small bend radius allows for space saving routing and packaging
- Performance comparable to semi-rigid cables
- Non-magnetic
- LSFH jacket



Construction			
Component	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 +/-2Ω
Operating frequency	≤ 40 GHz
Capacitance	95 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Screening effectiveness	100 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1 kVrms
Test voltage (50 Hz/1 min)	≤ 2 kVrms

Mechanical data	
Weight	approx. 7.5 g/m
Static bending radius	≥ 4 mm

Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	contains halogene

## Hand formable, 50 Ohm, 40 GHz, 85°C, Ø1.7 mm, LSFH jacket

SUCOFORM\_47\_CU\_LSFH

Suitable connectors	
Cable group	Y2

Ordering information		
Item number	Item description	Available as assembly only
23035506	SUCOFORM_47_CU_LSFH	No

Power Matrix			
Calculation: typical Attenuation [ formula: $(a \cdot f^{0.5} + b \cdot f)$ ] and maximum Power CW [ formula: $(p/f^{0.5})$ ]			
a coefficient typical =	<b>1.133</b>	b coefficient typical =	<b>0.0396</b>
fmax =	<b>40</b>	P at 1 GHz =	<b>11</b>
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.515	0.157	25
0.40	0.732	0.223	17
0.60	0.901	0.275	14
0.80	1.045	0.319	12
1.00	1.173	0.357	11
1.20	1.289	0.393	10
1.40	1.396	0.426	9
1.60	1.497	0.456	9
1.80	1.591	0.485	8
2.00	1.682	0.513	8
4.00	2.424	0.739	6
6.00	3.013	0.918	4
8.00	3.521	1.073	4
10.00	3.979	1.213	3
15.00	4.982	1.519	3
20.00	5.859	1.786	2
25.00	6.655	2.028	2
30.00	7.394	2.254	2
35.00	8.089	2.466	2
40.00	8.750	2.667	2

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.  
DOCUMENT PIM-P676 / Date of publication: 08.08.2024 / uncontrolled copy