DATA SHEET

Hand formable (RG403) 50Ohm, 40GHz, 85°C, ø3.2mm LSFH jacket

SUCOFORM_86_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
- LSFH jacket



Construction			
Component	**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	LSFH (modified polyethylene)	RAL 9005 - bk	3.2 mm +/- 0.1 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
Inner conductor resistance	199 Ω/km
Operating Voltage (at sea level)	≤ 1.5 kVrms
Test voltage (50 Hz/1 min)	≤ 3 kVrms

Mechanical data	
Weight	approx. 24 g/m
Static bending radius	≥ 6 mm
Repeated bending radius	20 mm

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Flame propagation standard	IEC 60332-2
	UL 1581 § 1100
Fire characteristics	contains halogene

Suitable connectors	
Cable group	Y16

Ordering information		
Item number	Item description	Available as assembly only
22512147	SUCOFORM_86_LSFH	No

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	**0.6283**	b coefficient typical =	**0.04**
fmax =	**40.0**	P at 1 GHz =	**30.0**
Frequency	**Nom. attenuation**	**Nom. attenuation**	**CW power**
GHz	**(dB/m)**	**(dB/ft)**	**(W)**
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.289	0.088	67
0.40	0.413	0.126	47
0.60	0.511	0.156	39
0.80	0.594	0.181	34
1.00	0.668	0.204	30
1.20	0.736	0.224	27
1.40	0.799	0.244	25
1.60	0.859	0.262	24
1.80	0.915	0.279	22
2.00	0.969	0.295	21
4.00	1.417	0.432	15
6.00	1.779	0.542	12
8.00	2.097	0.639	11
10.00	2.387	0.728	9
15.00	3.033	0.924	8
20.00	3.610	1.100	7
25.00	4.141	1.262	6
30.00	4.641	1.415	5
35.00	5.117	1.560	5
40.00	5.574	1.699	5

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