

Corrugated, 50 Ohm, 10 GHz, 85°C, ø13.4 mm, LSFH jacket

SUCOFEEED_1/2_HF_FR

Properties

- Low loss, low IM distortion levels
- High power capability
- High shielding effectiveness
- Flame retardant designs available



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper clad Aluminum	Wire	3.6 mm
Dielectric	SPE (Foamed Polyethylene)		9 mm
Outer conductor	Copper	Tube, corrugated, 100%	12.2 mm
Jacket	LSFH (modified polyethylene)	RAL 9011 - graphite black	13.4 mm +/- 0.2 mm

Electrical data	
Impedance	50 Ω +/-1Ω
Operating frequency	≤ 10 GHz
Capacitance	80.3 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	83 %
Signal delay	4 ns/m
Screening effectiveness	120dB
Insulation resistance	5000 MΩ*km
Inner conductor resistance	2.9 Ω/km
Operating Voltage (at sea level)	≤ 1.27 kVrms
Test voltage (50 Hz/1 min)	≤ 2.5 kVrms

Mechanical data	
Weight	approx. 200 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	50 mm (bendings, up to 15)
Tensile strength	700 N

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-25 °C ... 60 °C
CPR class	B2ca-s1a,d0,a1
Flame propagation standard	IEC 60332-1
	IEC 60332-3
	EN 60332-1-2
Fire characteristics	free of halogenes, acc. standard IEC 60754-2
Smoke test	IEC 61034
UV resistance	ISO 4892-2

Suitable connectors	
Cable group	M9

Ordering information		
Item number	Item description	Available as assembly only
84020859	SUCOFEEED_1/2_HF_FR	No
22512163	SUCOFEEED_1/2_HF_FR	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 =	0.0987202	b coefficient typical =	0.0094205
fmax =	10	P at 1 GHz =	830
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
0.10	0.032	0.010	2625
0.20	0.046	0.014	1856
0.40	0.066	0.020	1312
0.60	0.082	0.025	1072
1.00	0.108	0.033	830
1.50	0.135	0.041	678
2.00	0.158	0.048	587
6.00	0.298	0.091	339
6.50	0.313	0.095	326
7.00	0.327	0.100	314
7.50	0.341	0.104	303
8.00	0.355	0.108	293
8.50	0.368	0.112	285
9.00	0.381	0.116	277
9.50	0.394	0.120	269
10.00	0.406	0.124	262

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