

Flexible microwave cable

S_04262_B-01 Item: 84000918

Description

S: Low loss RF cables with foam PE dielectrics
50 Ohm, 18 GHz, 85°C, ø5.5 mm, LSFH jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm
Dielectric	SPE (Foamed Polyethylene)		3.8 mm
Outer conductor	Aluminium	longitudinal Foil, 100%	4 mm
Outer conductor	Copper, Tin plated	Braid, 87 %	4.5 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	5.5 mm +/- 0.1

Print: HUBER+SUHNER S 04262 B-01 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	18 GHz
Capacitance	82 pF/m
Velocity of signal propagation	82 %
Signal delay	4.1 ns/m
Screening effectiveness	≥ 90 dB (up to 18 GHz)
Operating voltage	≤ 0.5 kV _{rms} (at sea level)
Test voltage	1 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.1 kg/100 m
Min. bending radius	static	25 mm
	dynamic	90 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-1, EN 50265-2-1
Halogen test	IEC 60754-2
Halogen free	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

Additional Information

Remarks

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

Suitable Connectors

Cable group	X9 4 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 = 0.197

b = 0.045

$f_{\max} = 18$

P at 1GHz = 120

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 (W) sea level 40° C ambient temperature
0,9	0,23	0,069	126
1,8	0,35	0,105	89
2,7	0,45	0,136	73
3,6	0,54	0,163	63
4,5	0,62	0,189	57
5,4	0,7	0,214	52
6,3	0,78	0,237	48
7,2	0,85	0,260	45
8,1	0,93	0,282	42
9,0	1,0	0,304	40
9,9	1,07	0,325	38
10,8	1,13	0,345	37
11,7	1,2	0,366	35
12,6	1,27	0,386	34
13,5	1,33	0,406	33
14,4	1,4	0,425	32
15,3	1,46	0,445	31
16,2	1,52	0,464	30
17,1	1,58	0,483	29
18,0	1,65	0,502	28