

Flexible RF cable

Enviroflex_B400 Item: 85087104

Description

Enviroflex: LSFH alternatives to RG cables

RG400 LSFH basic type, 50 Ohm, 6 GHz, 85°C, ø5 mm, LSFH jacket, Flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	1 mm
Dielectric	SPE (Foamed Polyethylene)		3 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 70%	3.4 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	5 mm +/- 0.1

Print: HUBER+SUHNER ENVIROFLEX B400 50 OHM (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	94.5 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Screening effectiveness	≥ 45 dB (up to 6 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.3 kg/100 m
Min. bending radius	static	20 mm
	repeated (for ≤ 10000 bendings)	40 mm
	dynamic	40 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Cold bend test	MIL-C-17 § 4.8.19
Flame propagation test	IEC 60332-1,
Halogen free	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

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	U11 3 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 = 0.402

b = 0.142

f_{max} = 6

P at 1GHz = 130

Frequency (GHz)	Nom. attenuation (dB / m)	Nom. attenuation (dB / ft)	Max. CW power (W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,3	0,26	0,080	237
0,6	0,4	0,121	168
0,9	0,51	0,155	137
1,2	0,61	0,186	119
1,5	0,71	0,215	106
1,8	0,79	0,242	97
2,1	0,88	0,268	90
2,4	0,96	0,294	84
2,7	1,04	0,318	79
3,0	1,12	0,342	75
3,3	1,2	0,365	72
3,6	1,27	0,388	69
3,9	1,35	0,411	66
4,2	1,42	0,433	63
4,5	1,49	0,455	61
4,8	1,56	0,476	59
5,1	1,63	0,497	58
5,4	1,7	0,518	56
5,7	1,77	0,539	54
6,0	1,84	0,560	53