

Flexible RF cable

Enviroflex_B223 Item: 85087022

Description

Enviroflex: LSFH alternatives to RG cables

RG223 LSFH basic type, 50 Ohm, 6 GHz, 85°C, ø5.4 mm, LSFH jacket, Flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.88 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96%	3.5 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4.1 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	5.4 mm +/- 0.1

Print: HUBER+SUHNER ENVIROFLEX B223 50 OHM (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	102.5 pF/m
Velocity of signal propagation	66 %
Signal delay	5 ns/m
Screening effectiveness	≥ 60 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		5.6 kg/100 m
Min. bending radius	static	30 mm
	repeated (for ≤ 3000 bendings)	54 mm
	dynamic	60 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	U9 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 = 0.3204

b = 0.1374

f_{max} = 6

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
0,3	0,22	0,066	219
0,6	0,33	0,101	155
0,9	0,43	0,130	126
1,2	0,52	0,157	110
1,5	0,6	0,182	98
1,8	0,68	0,206	89
2,1	0,75	0,229	83
2,4	0,83	0,252	77
2,7	0,9	0,274	73
3,0	0,97	0,295	69
3,3	1,04	0,316	66
3,6	1,1	0,336	63
3,9	1,17	0,356	61
4,2	1,23	0,376	59
4,5	1,3	0,396	57
4,8	1,36	0,415	55
5,1	1,42	0,434	53
5,4	1,49	0,453	52
5,7	1,55	0,472	50
6,0	1,61	0,490	49