

Flexible RF cable Enviroflex_B214

Description

Enviroflex: LSFH alternatives to RG cables

RG214 LSFH basic type, 50 Ohm, 6 GHz, 85°C, ø10.8 mm, LSFH jacket, Flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Strand-07	2.25 mm
Dielectric	PE (Polyethylene)		7.25 mm
Outer conductor	Copper, Tin plated	Braid, 91%	7.9 mm
Outer conductor	Copper, Tin plated	Braid, 88 %	8.6 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	10.8 mm +/- 0.15

Print: HUBER+SUHNER ENVIROFLEX B214 50 OHM (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5 ns/m
Screening effectiveness	≥ 50 dB (up to 6 GHz)
Operating voltage	≤ 5 kV _{rms} (at sea level)
Test voltage	10 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		18.3 kg/100 m
Min. bending radius	static	57 mm
	repeated (for ≤ 2000 bendings)	
	dynamic	114 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

Ordering Information

Order as Enviroflex_B214

Remarks

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

Suitable Connectors

Cable group U32 7 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 = 0.202

b = 0.063

$f_{max} = 6$

P at 1GHz = 325

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	0,13	0,039	593
0,6	0,19	0,059	420
0,9	0,25	0,076	343
1,2	0,3	0,090	297
1,5	0,34	0,104	265
1,8	0,38	0,117	242
2,1	0,43	0,130	224
2,4	0,46	0,141	210
2,7	0,5	0,153	198
3,0	0,54	0,164	188
3,3	0,57	0,175	179
3,6	0,61	0,186	171
3,9	0,64	0,196	165
4,2	0,68	0,207	159
4,5	0,71	0,217	153
4,8	0,74	0,227	148
5,1	0,78	0,237	144
5,4	0,81	0,247	140
5,7	0,84	0,256	136
6,0	0,87	0,266	133