

Flexible RF cable Enviroflex_B58

Description

Enviroflex: LSFH alternatives to RG cables

RG58 LSFH basic type, 50 Ohm, 1 GHz, 85°C, ø4.95 mm, LSFH jacket, Flame retardant



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 94%	3.5 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	4.95 mm +/- 0.15

Print: HUBER+SUHNER ENVIROFLEX B58 50 OHM (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5 ns/m
Screening effectiveness	≥ 40 dB (up to 3 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		3.8 kg/100 m
Min. bending radius	static	25 mm
	repeated (for ≤ 15000 bendings)	40 mm
	dynamic	50 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Cold bend test	MIL-C-17 § 4.8.19
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_B58
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Remarks

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

Suitable Connectors

Cable group	U7 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 = 0.3455

b = 0.2373

f_{max} = 1

P at 1GHz = 105

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,05	0,09	0,027	470
0,1	0,13	0,041	332
0,15	0,17	0,052	271
0,2	0,2	0,062	235
0,25	0,23	0,071	210
0,3	0,26	0,079	192
0,35	0,29	0,088	177
0,4	0,31	0,096	166
0,45	0,34	0,103	157
0,5	0,36	0,111	148
0,55	0,39	0,118	142
0,6	0,41	0,125	136
0,65	0,43	0,132	130
0,7	0,46	0,139	125
0,75	0,48	0,145	121
0,8	0,5	0,152	117
0,85	0,52	0,159	114
0,9	0,54	0,165	111
0,95	0,56	0,171	108
1,0	0,58	0,178	105