Data Sheet

Flexible RF cable
SPUMA_195-FR-01

Description

Spuma: Flexible, low-loss RF cables (LMR* alternatives)

50 Ohm, 6 GHz, 85°C, ø4.98 mm, LSFH jacket, Flame retardant, Railway and CPR qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	0.94 mm
Dielectric	SPE (Foamed Polyethylene)		2.83 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	2.95 mm
Outer conductor	Copper, Tin plated	Braid, 92 %	3.52 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	4.98 mm +/- 0.1

Print: HUBER+SUHNER SPUMA 195-FR-01 50 Ohm Eca (PA no.)

Electrical Data

Impedance		50 Ω +/- 2
Operating Frequency		6 GHz
Capacitance		90.8 pF/m
Velocity of signal propagation		76.1 %
Signal delay		4.54 ns/m
Screening effectiveness		≥ 90 dB (up to 6 GHz)
Operating voltage		≤ 0.5 kV_{rms} (at sea level)
Test voltage		1 kV_{rms} (50 Hz/1 min)

Mechanical Data

Weight		3.97 kg/100 m
Min. bending radius	static	10 mm
	repeated	40 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	EN 60332-1-2, EN 50305, 9.1.2
Smoke density test	EN 61034-2
Halogen test	IEC 60754
Halogen free	Yes
2011/65/EU (RoHS)	compliant
2006/1907/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed
2011/305/EU (CPR)	compliant, Eca

Additional Information

EN 45545-2 compliant hazard level for indoor cables: HL3 NFPA-130 compliant An operating temperature of -55°C is feasible for static applications. *) LMR is a registered trademark of Times Microwave Inc.

Ordering Information

Order as	SPUMA_195-FR-01

Remarks

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

Suitable Connectors

Cable group	X27 3 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a =	0.3754	b =	0.0169	f_{max} =	6	P at 1GHz =	160

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	0,21	0,064	292
0,6	0,3	0,092	207
0,9	0,37	0,113	169
1,2	0,43	0,132	146
1,5	0,49	0,148	131
1,8	0,53	0,163	119
2,1	0,58	0,177	110
2,4	0,62	0,190	103
2,7	0,66	0,202	97
3,0	0,7	0,214	92
3,3	0,74	0,225	88
3,6	0,77	0,236	84
3,9	0,81	0,246	81
4,2	0,84	0,256	78
4,5	0,87	0,266	75
4,8	0,9	0,275	73
5,1	0,93	0,285	71
5,4	0,96	0,294	69
5,7	0,99	0,303	67
6,0	1,02	0,311	65

Waiver: Fact and figures herein are for information only and do not represent any warranty of any kind.

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