

Flexible RF cable

SPUMA_240 Item: 84151737

Description

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

50 Ohm, 6 GHz, 85°C, ø6.15 mm, PE jacket, CPR qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	1.42 mm
Dielectric	SPE (Foamed Polyethylene)		3.81 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 90 %	4.52 mm
Jacket	PE (Polyethylene)	RAL 9005 - bk	6.15 mm +/- 0.13

Print: HUBER+SUHNER SPUMA 240 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	79 pF/m
Velocity of signal propagation	84 %
Signal delay	3.97 ns/m
Screening effectiveness	≥ 90 dB (up to 6 GHz)
Operating voltage	≤ 1.2 kV _{rms} (at sea level)
Test voltage	2 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	5 kg/100 m
Min. bending radius	static 19 mm 60 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
Halogen free	Yes
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed
2011/305/EU (CPR)	compliant, Fca

Additional Information

*) LMR is a registered trademark of Times Microwave Inc.

Remarks

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

Suitable Connectors

Cable group	X28 4 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 = 0.2507

b = 0.009

f_{max} = 6

P at 1GHz = 260

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
0,3	0,14	0,043	475
0,6	0,2	0,061	336
0,9	0,25	0,075	274
1,2	0,29	0,087	237
1,5	0,32	0,098	212
1,8	0,35	0,107	194
2,1	0,38	0,116	179
2,4	0,41	0,125	168
2,7	0,44	0,133	158
3,0	0,46	0,141	150
3,3	0,49	0,148	143
3,6	0,51	0,155	137
3,9	0,53	0,162	132
4,2	0,55	0,168	127
4,5	0,57	0,174	123
4,8	0,59	0,181	119
5,1	0,61	0,187	115
5,4	0,63	0,192	112
5,7	0,65	0,198	109
6,0	0,67	0,204	106