

Flexible RF cable SPUMA_240-FR-AM

Description

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

50 Ohm, 6 GHz, 85°C, ø6.17 mm, LSFH jacket, Flame retardant,
Bus qualified



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	1.42 mm
Dielectric	SPE (Foamed Polyethylene)		3.82 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.94 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4.52 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	6.17 mm +/- 0.1

Print: HUBER+SUHNER SPUMA 240-FR-AM 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	78.9 pF/m
Velocity of signal propagation	82.6 %
Signal delay	4.05 ns/m
Screening effectiveness	≥ 90 dB (up to 6 GHz)
Operating voltage	≤ 0.9 kV _{rms} (at sea level)
Test voltage	1.5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		6.1 kg/100 m
Min. bending radius	static	14 mm
	repeated	53 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)	compliant
2006/1907/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

Additional Information

ISO 6722-1 5.22 (UN ECE-R 118.01) compliant *) LMR is a registered trademark of Times Microwave Inc.

Ordering Information

Order as SPUMA_240-FR-AM

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 = 0.25984

b = 0.00926

$f_{\max} = 6$

P at 1GHz = 260

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	0,15	0,044	475
0,6	0,21	0,063	336
0,9	0,25	0,078	274
1,2	0,3	0,090	237
1,5	0,33	0,101	212
1,8	0,37	0,111	194
2,1	0,4	0,121	179
2,4	0,42	0,129	168
2,7	0,45	0,138	158
3,0	0,48	0,146	150
3,3	0,5	0,153	143
3,6	0,53	0,160	137
3,9	0,55	0,167	132
4,2	0,57	0,174	127
4,5	0,59	0,181	123
4,8	0,61	0,187	119
5,1	0,63	0,193	115
5,4	0,65	0,199	112
5,7	0,67	0,205	109
6,0	0,69	0,211	106