

Low-loss, 50 Ohm, 6 GHz, 85°C, ø6.17 mm, LSFH jacket

SPUMA_240-FR-AM

Properties

- Halogen free cable with standard dimensions
- Ozone, UV and weathering resistance
- Bus qualified



Construction			
Component	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
	LSFH (modified polyethylene)	RAL 9005 - bk	6.17 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 6 GHz
Capacitance	78.9 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	82.6 %
Signal delay	4.05 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Inner conductor resistance	10.89 Ω/km
Outer conductor resistance	9.35 Ω/km
Operating Voltage (at sea level)	≤ 0.9 kVrms
Test voltage (50 Hz/1 min)	≤ 1.5 kVrms

Mechanical data	
Weight	approx. 61 g/m
Static bending radius	≥ 14 mm
Repeated bending radius	53 mm

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Environmental data			
Operation temperature		-40 °C ... 85 °C	
Installation temperature		-20 °C ... 60 °C	
Fire characteristics		free of halogenes, acc. standard IEC 60754	
Compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
85069656	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Free of SVHC >0,1%	
Additional Information			
ISO 6722-1 5.22 (UN ECE-R 118.01) compliant			
Suitable connectors			
Cable group		X28	
Ordering information			
Item number	Item description		Available as assembly only
85069656	SPUMA_240-FR-AM		No
Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	0.257	b coefficient typical =	0.009
fmax =	6	P at 1 GHz =	260
Frequency	Nom. attenuation	Nom. attenuation	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
0.10	0.082	0.025	822
0.20	0.117	0.036	581
0.40	0.166	0.051	411
0.60	0.204	0.062	336
1.00	0.266	0.081	260
1.50	0.328	0.100	212
2.00	0.381	0.116	184
6.00	0.684	0.208	106

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