

Low-loss, 50 Ohm, 6 GHz, 85°C, ø5.5 mm, LSFH jacket

S_04162_B-01

Properties

- Alternative to standard SPUMA cables
- Low loss
- Low smoke
- Flame retardant



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm - 0.1 mm
Dielectric	SPE (Foamed Polyethylene)		3.8 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	4.2 mm
Outer conductor	Copper, Tin plated	Braid, 86%	4.6 mm
Jacket	LSFH (modified polyethylene)	RAL 9005 - bk	5.5 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 6 GHz
Capacitance	80.3 pF/m
Velocity of signal propagation	83 %
Signal delay	4.01 ns/m
Screening effectiveness	80 dB at frequency 2.2GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	11.4 Ω/km
Operating Voltage (at sea level)	≤ 0.5 kVrms
Voltage Rating UL	30 V
Test voltage (50 Hz/1 min)	≤ 1 kVrms

Mechanical data	
Weight	approx. 47.8 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	60 mm

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Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	UL 1581 § 1080 (VW-I)
Fire characteristics	free of halogenes
UV resistance	ISO 4892-2A

Additional Information
Alternative type: Spuma_240-FR-01

Suitable connectors
Cable groupX9

Ordering information		
Item number	Item description	Available as assembly only
84023780	S_04162_B-01	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 =	0.235	b coefficient typical =	0.0274
fmax =	6.0	P at 1 GHz =	138.0
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.10	0.077	0.023	436
0.20	0.111	0.034	309
0.40	0.160	0.049	218
0.60	0.198	0.060	178
1.00	0.262	0.080	138
1.50	0.329	0.100	113
2.00	0.387	0.118	98
6.00	0.740	0.226	56

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