

Low-loss, 50 Ohm, 6 GHz, 85°C, ø4.5 mm, PUR jacket

S_02112_D

Properties

- Alternative to standard SPUMA cables
- Low loss



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm - 0.15 mm
Dielectric	SPE (Foamed Polyethylene)		2.39 mm
Outer conductor	Copper	Braid, 96%	2.9 mm
Outer conductor	Copper	Braid, 84%	3.5 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	4.5 mm +/- 0.15 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 6 GHz
Capacitance	83 pF/m
Velocity of signal propagation	82 %
Signal delay	4.08 ns/m
Screening effectiveness	81 dB at frequency 0.001 GHz ... 6GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	33 Ω/km
Operating Voltage (at sea level)	≤ 0.35 kVrms
Phase vs temperature	-40 ... 70°C
Test voltage (50 Hz/1 min)	≤ 0.7 kVrms

Mechanical data	
Weight	approx. 37 g/m
Static bending radius	≥ 22 mm
Repeated bending radius	45 mm (bendings, up to 50)

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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

Suitable connectors	
Cable group	S8

Ordering information		
Item number	Item description	Available as assembly only
22511910	S_02112_D	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 =	0.5272	b coefficient typical =	0.1353
fmax =	6	P at 1 GHz =	80
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	0.180	0.055	253
0.20	0.263	0.080	179
0.40	0.388	0.118	126
0.60	0.490	0.149	103
1.00	0.662	0.202	80
1.50	0.849	0.259	65
2.00	1.016	0.310	57
6.00	2.103	0.641	33

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