

Low-loss, 50 Ohm, 8 GHz, 85°C, Ø4.98 mm, LSFH jacket

SPUMA_195-FR-01

Properties

- Halogen free cable with standard dimensions
- Low smoke
- Ozone, UV and weathering resistance
- CPR qualified
- Railway qualified



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper	Wire	0.94 mm
Dielectric	SPE (Foamed Polyethylene)		2.83 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	2.95 mm
Outer conductor	Copper, Tin plated	Braid, 92%	3.52 mm
	LSFH (modified polyethylene)	RAL 9005 - bk	4.98 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 8 GHz
Capacitance	90.8 pF/m
Inductance	0.2 μH/m
Velocity of signal propagation	76.1 %
Signal delay	4.54 ns/m
Screening effectiveness	90 dB at frequency 6GHz
Insulation resistance	1000000 MΩ*m
Operating Voltage (at sea level)	≤ 0.5 kVrms
Test voltage (50 Hz/1 min)	≤ 1 kVrms

Mechanical data	
Weight	approx. 39.7 g/m
Static bending radius	≥ 10 mm
Repeated bending radius	40 mm

Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60°C
CPR class	Eca

Low-loss, 50 Ohm, 8 GHz, 85°C, Ø4.98 mm, LSFH jacket

SPUMA_195-FR-01

Environmental data	
Flame propagation standard	EN 60332-1-2 EN 50305, 9.1.2
Fire characteristics	free of halogenes, acc. standard IEC 60754
Smoke test	EN 61034-2

Additional Information
EN 45545-2 compliant

Suitable connectors
Cable group
X27 X27

Ordering information		
Item number	Item description	Available as assembly only
85021562	SPUMA_195-FR-01	No

Power Matrix			
Calculation: typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]			
a coefficient typical =	0.3754	b coefficient typical =	0.0169
fmax =	8	P at 1 GHz =	160
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	0.120	0.037	506
0.20	0.171	0.052	358
0.40	0.244	0.074	253
0.60	0.301	0.092	207
1.00	0.392	0.120	160
1.50	0.485	0.148	131
2.00	0.565	0.172	113
6.00	1.021	0.311	65
6.50	1.067	0.325	63
7.00	1.112	0.339	60
7.50	1.155	0.352	58
8.00	1.197	0.365	57

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P776 / Date of publication: 10.04.2024 / uncontrolled copy