

Low-loss, 50 Ohm, 3 GHz, 85°C, ø10.8 mm, PUR jacket

S_07212_BD

Properties

- Alternative to standard SPUMA cables
- Low loss



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07, 96%	2.82 mm - 0.15 mm
Dielectric	SPE (Foamed Polyethylene)	100%	7.38 mm
Outer conductor	Copper, Silver plated	longitudinal Foil	8 mm
Outer conductor	Copper	Wrapped foil	8.1 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	10.8 mm +/- 0.15 mm

Electrical data	
Impedance	50 Ω +/-1Ω
Operating frequency	≤ 3 GHz
Capacitance	82 pF/m
Velocity of signal propagation	82 %
Signal delay	4.13 ns/m
Screening effectiveness	90 dB at frequency 0.001 GHz ... 3GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	1.95 Ω/km
Operating Voltage (at sea level)	≤ 1.05 kVrms
Phase vs temperature	2370 ppm at temperature -25 ... 85°C
Phase vs bending	0.4 °/GHz
Test voltage (50 Hz/1 min)	≤ 2.1 kVrms

Mechanical data	
Weight	approx. 206 g/m
Static bending radius	≥ 70 mm
Repeated bending radius	110 mm

Low-loss, 50 Ohm, 3 GHz, 85°C, ø10.8 mm, PUR jacket
S_07212_BD

Environmental data	
Operation temperature	-40 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	free of halogenes

Additional Information
Elimination candidate Alternative type: Spuma_400-RS-FR

Suitable connectors
Cable groupS32

Ordering information		
Item number	Item description	Available as assembly only
22511864	S_07212_BD	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 =	0.1507	b coefficient typical =	0.0353
fmax =	3	P at 1 GHz =	550
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	0.051	0.016	1739
0.20	0.074	0.023	1230
0.40	0.109	0.033	870
0.60	0.138	0.042	710
1.00	0.186	0.057	550
1.50	0.238	0.072	449
2.00	0.284	0.086	389
3.00	0.367	0.112	318

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-P943 / Date of publication: 08.08.2024 / uncontrolled copy