

## Coaxial Cable S\_07212\_BD

### Description

PE Foam - 50 Ohm - high screened - precision type



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.82 mm
Dielectric	SPE (Foamed Polyethylene)		7.38 mm
Outer conductor	Copper, Silver plated	Braid, 96%	8 mm
Outer conductor	Copper	wrapped Foil, 100 %	8.1 mm
Outer conductor	Copper, Tin plated	Braid, 93 %	9 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	10.8 mm +/- 0.15

Print: HUBER+SUHNER S 07212 BD 50 Ohm (PA no.)

#### Electrical Data

Impedance		50 Ω +/- 1
Operating Frequency		3 GHz
Capacitance		82 pF/m
Velocity of signal propagation		82 %
Signal delay		4.13 ns/m
Insulation resistance		≥ 1 x 10 <sup>8</sup> MQm
Min. screening effectiveness		≥ 90 dB (up to 3 GHz)
Max. operating voltage		≤ 1.05 kV <sub>rms</sub> (at sea level)
Test voltage		2.1 kV <sub>rms</sub> (50 Hz/1 min)
Phase vs Temperature	-25°C... + 85°C	2370 ppm
Phase vs Bending		0.4 °/GHz

#### Mechanical Data

Weight		20.6 kg/100 m
Min. bending radius	static	70 mm
	repeated (for ≤ 50 bendings)	110 mm

#### Environmental Data

Temperature range	-40 °C... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
2011/95/EC (RoHS)	compliant

### Additional Information

#### Ordering Information

Order as S\_07212\_BD

#### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

Cable group S32 7 mm / 50 Ohm

## Coaxial Cable S\_07212\_BD

**Matrix** typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

Coefficients:

a = 0.1507

b = 0.0353

$f_{max} = 3$

P at 1GHz = 550

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
0.15	0.06	0.019	1420
0.3	0.09	0.028	1004
0.45	0.12	0.036	820
0.6	0.14	0.042	710
0.75	0.16	0.048	635
0.9	0.17	0.053	580
1.05	0.19	0.058	537
1.2	0.21	0.063	502
1.35	0.22	0.068	473
1.5	0.24	0.072	449
1.65	0.25	0.077	428
1.8	0.27	0.081	410
1.95	0.28	0.085	394
2.1	0.29	0.089	380
2.25	0.31	0.093	367
2.4	0.32	0.097	355
2.55	0.33	0.101	344
2.7	0.34	0.105	335
2.85	0.36	0.108	326
3.0	0.37	0.112	318