

Coaxial Cable S_04272_B

Description

PE Foam - microwave cable - high screened



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	1.4 mm
Dielectric	SPE (Foamed Polyethylene)		3.83 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100%	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 86 %	4.48 mm
Jacket	PE (Polyethylene)	RAL 5014 - bl	5.5 mm +/- 0.1

Print: HUBER+SUHNER S 04272 B 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	18 GHz
Capacitance	82 pF/m
Velocity of signal propagation	82 %
Signal delay	4.1 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 0.5 kV _{rms} (at sea level)
Test voltage	1 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.4 kg/100 m
Min. bending radius	static	25 mm
	repeated (for ≤ 50 bendings)	90 mm

Environmental Data

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

Additional Information

Ordering Information

Order as S_04272_B

Remarks

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

Suitable Connectors

Cable group X9 4 mm / 50 Ohm

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

Coefficients:

a = 0.197

b = 0.045

$f_{max} = 18$

P at 1GHz = 120

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
0.9	0.23	0.069	126
1.8	0.35	0.105	89
2.7	0.45	0.136	73
3.6	0.54	0.163	63
4.5	0.62	0.189	57
5.4	0.7	0.214	52
6.3	0.78	0.237	48
7.2	0.85	0.260	45
8.1	0.93	0.282	42
9.0	1.0	0.304	40
9.9	1.07	0.325	38
10.8	1.13	0.345	37
11.7	1.2	0.366	35
12.6	1.27	0.386	34
13.5	1.33	0.406	33
14.4	1.4	0.425	32
15.3	1.46	0.445	31
16.2	1.52	0.464	30
17.1	1.58	0.483	29
18.0	1.65	0.502	28