

HUBER+SUHNER® DATA SHEET

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)		3.82 mm
Outer conductor	Aluminum / PES	longitudinal Foil, 100 %	3.96 mm
Outer conductor	Copper, Tin plated	Braid, 86 %	4.48 mm
Jacket	PE	RAL 5014 - bl	5.5 mm +/- 0.1
Print	HUBER+SUHNER S 04272 B 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 2
Max. 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 max. 50 bendings) 90 mm

Environmental Data

Temperature range	-40 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
2002/95/EC (RoHS)	compliant

Ordering Information

Order as S_04272_B

Additional Information

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	crimped (on request)
	clamped (on request)
	soldered —

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

Coefficients:

a=	0.197	b=	0.045	f _{max} =	18	p _{at} 1GHz =	120
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.9		0.23		0.070		126
	1.8		0.35		0.107		89
	2.7		0.45		0.137		73
	3.6		0.54		0.165		63
	4.5		0.62		0.189		57
	5.4		0.70		0.213		52
	6.3		0.78		0.238		48
	7.2		0.85		0.259		45
	8.1		0.93		0.283		42
	9.0		1.00		0.305		40
	9.9		1.07		0.326		38
	10.8		1.13		0.344		37
	11.7		1.20		0.366		35
	12.6		1.27		0.387		34
	13.5		1.33		0.405		33
	14.4		1.40		0.427		32
	15.3		1.46		0.445		31
	16.2		1.52		0.463		30
	17.1		1.58		0.482		29
	18.0		1.65		0.503		28

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER!

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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