

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SUCOFEED_7/8_LA

Description

Corrugated coaxial cable - low attenuation



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Tube	typ. 9.5 mm
Dielectric	SPE (Foamed Polyethylene)		typ. 22.7 mm
Outer conductor	Copper	Tube (c), 100 %	typ. 25.4 mm
Jacket	PE-LD	Black	27.9 mm +/- 0.4
Print	HUBER+SUHNER_SUCOFEED_7/8_LA_#batch-number#_#metric-length#		

Electrical Data

Impedance	50	Ω +/- 1
Operating frequency	≤ 5	GHz
Capacitance	typ. 73.8	pF/m
Inductance	typ. 0.2	μ H/m
Velocity of signal propagation	typ. 90.3	%
Signal delay	typ. 3.7	ns/m
Insulation resistance	$\geq 5 \times 10^6$	M Ω m
Screening effectiveness	≥ 120	dB
Operating voltage	≤ 3	kV _{rms} (at sea level)
Test voltage	6	kV _{rms} (50 Hz/1 min)
Outer conductor resistance DC	≤ 1.12	Ω /km
Inner conductor resistance DC	≤ 1.35	Ω /km

Mechanical Data

Weight	≤ 48	kg/100 m
Bending radius	static	≥ 127 mm
	repeated (for ≤ 15 bendings)	≥ 260 mm
Tensile strength	≤ 1450	N
Bending force moment	≤ 37	Nm

Environmental Data

Temperature range	-40 °C... + 85 °C
Installation temperature	-25 °C... + 60 °C
Halogen test	IEC 60754-1
2002/95/EC (RoHS)	compliant

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group M25

Suitable Tools

Cable tool 74_Z-0-23-17

Suitable Grounding Kit

Cable grounding kit 9076.99.N078 9076.99.P078

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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=	0.033954611 typ.	b=	0.00362963 typ.	f _{max.} =	5	P ≤	2260
						at 1GHz	
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / 100 m)		(dB / 100 ft)		(watt)
			sea level 20° C ambient temperature		sea level 20° C ambient temperature		sea level 40° C ambient temperature
	0.100		1.11		0.34		7147
	0.150		1.37		0.42		5835
	0.174		1.48		0.45		5418
	0.200		1.59		0.48		5054
	0.400		2.29		0.70		3573
	0.450		2.44		0.74		3369
	0.500		2.58		0.79		3196
	0.512		2.62		0.80		3158
	0.800		3.33		1.01		2527
	0.894		3.53		1.08		2390
	0.960		3.68		1.12		2307
	1.000		3.76		1.15		2260
	1.500		4.70		1.43		1845
	1.700		5.04		1.54		1733
	1.800		5.21		1.59		1685
	1.880		5.34		1.63		1648
	2.000		5.53		1.69		1598
	2.200		5.83		1.78		1524

Matrix **typical Return Loss**

	Frequency		Frequency		Frequency		
	Range 1		Range 2		Range 3		
	(MHz)		(MHz)		(MHz)		
	380 to 470		806 to 960		1710 to 2200		
	typ. 28.5 dB		typ. 26.9 dB		typ. 25.6 dB		

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

WAIVER!

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