HUBER+SUHNER® DATA SHEET
Coaxial Cable: SUCOFEED_1/2_FR_UL

Rev.: **H**

Description

Corrugated coaxial cable - high flame retardant - UL Listed (CATVR)

Technical Data

Construction

	Material	Detail	Diameter		
Centre conductor	Copper clad Aluminum	Wire	typ. 4.8	mm	
Dielectric	SPE (Foamed Polyethylene)		typ. 11.9	mm	
Outer conductor	Copper	Tube (c), 100 %	typ. 13.7	mm	
Jacket	LSFH (modified polyethylene)	Black	16	mm	+/- 0.3
Print	HUBER+SUHNER_SUCOFEED_1/2_FR_UL_1655_CATVR _5_AWG_75_°C_FT4_#batch-number#_#metric-length#				

Electrical Data

Impedance		50	Ω +/- 1
Operating frequency		≤ 8	GHz
Capacitance		typ. 76	pF/m
Inductance		typ. 0.2	µH/m
Velocity of signal propagation		typ. 88	%
Signal delay		typ. 3.8	ns/m
Insulation resistance		≥ 1 x 10^7	MΩm
Screening effectiveness		≥ 120	dB
Operating voltage		≤ 1.6	kV_{rms} (at sea level)
Test voltage		3.3	kV_{rms} (50 Hz/1 min)
Outer conductor resistance DC		≤ 2.2	Ω/km
Inner conductor resistance DC		≤ 1.6	Ω/km

Mechanical Data

Weight		≤ 25.8	kg/100 m
Bending radius	static	≥ 70	mm
	repeated (for ≤ 20 bendings)	≥ 125	mm
Tensile strength		≤ 1100	N
Bending force moment		≤ 5	Nm

Environmental Data

Temperature range		-40 °C... + 85 °C
Installation temperature		-20 °C... + 60 °C
Flammability	IEC 60332-1, IEC 60332-3 (A), UL 1666	
Smoke density	IEC 61034	
Halogen test	IEC 60754-2	
2002/95/EC (RoHS)	compliant	

Additional Information

Remarks

(For details contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	M12 12 mm / 50 Ohm

Suitable Tools

Cable tool	74_Z-0-12-15

Suitable Grounding Kit

Cable grounding kit	9076.99.N012 9076.99.P012

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

Coefficients:

a=	0.067398706 typ.	b=	0.005459591 typ.	$f_{max.}$=	8	P ≤ at 1GHz	1040
	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		2.19		0.67		3289
	0.150		2.69		0.82		2685
	0.200		3.12		0.95		2326
	0.400		4.48		1.37		1644
	0.450		4.77		1.45		1550
	0.500		5.04		1.54		1471
	0.700		6.02		1.83		1243
	0.800		6.47		1.97		1163
	0.900		6.89		2.10		1096
	1.000		7.29		2.22		1040
	1.500		9.07		2.76		849
	1.700		9.72		2.96		798
	1.800		10.03		3.06		775
	2.000		10.62		3.24		735
	2.200		11.20		3.41		701
	2.500		12.02		3.66		658
	3.000		13.31		4.06		600

Matrix **typical Return Loss**

	Frequency Range 1		**Frequency Range 2**		**Frequency Range 3**		**Frequency Range 4**
	(MHz)		**(MHz)**		**(MHz)**		**(MHz)**
	380 to 470		806 to 960		1710 to 2200		5 to 2700
	typ. 28.5 dB		typ. 28.5 dB		typ. 26 dB		typ. 25.5 dB

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.

HUBER+SUHNER – Excellence in Connectivity Solutions

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