

HUBER+SUHNER® DATA SHEET

Coaxial Cable: SUCOFLEX_106

Description

SUCOFLEX 100, the flexible, high performance microwave cable



Technical Data

Construction

	Material	Detail	Diameter	
Centre conductor	Copper, Silver plated	Wire		
Dielectric	PTFE			
Outer conductor	Copper, Silver plated	wrapped Foil, 100 %		
Outer conductor	Copper, Silver plated	Braid		
Jacket	FEP	RAL 5000 - bl	7.9	mm

Electrical Data

Impedance	50	Ω +/- 1
Max. operating frequency	18	GHz
Capacitance	87	pF/m
Velocity of signal propagation	77	%
Signal delay	4.3	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M Ω m
Min. screening effectiveness	>90	dB (up to 18 GHz)
Max. operating voltage	3.8	kV _{rms} (at sea level)

Mechanical Data

Weight	15.7	kg/100 m
Min. bending radius	static	24 mm
	dynamic	40 mm

Environmental Data

Temperature range	-55 °C... + 165 °C
Flammability	MIL-T-87104 - §4.6.4.8

Ordering Information

Order as SUCOFLEX_106 (available only as assembly)

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 n/a

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Rev.: E

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

Coefficients:

a=	0.15	b=	0.0071	f _{max} =	18	p _{at} 1GHz =	1582
	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		0.15		0.046		1668
	1.8		0.21		0.064		1179
	2.7		0.27		0.082		963
	3.6		0.31		0.094		834
	4.5		0.35		0.107		746
	5.4		0.39		0.119		681
	6.3		0.42		0.128		630
	7.2		0.45		0.137		590
	8.1		0.48		0.146		556
	9.0		0.51		0.155		527
	9.9		0.54		0.165		503
	10.8		0.57		0.174		481
	11.7		0.60		0.183		463
	12.6		0.62		0.189		446
	13.5		0.65		0.198		431
	14.4		0.67		0.204		417
	15.3		0.70		0.213		404
	16.2		0.72		0.219		393
	17.1		0.74		0.226		383
	18.0		0.76		0.232		373

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

WAIVER!

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