Data Sheet

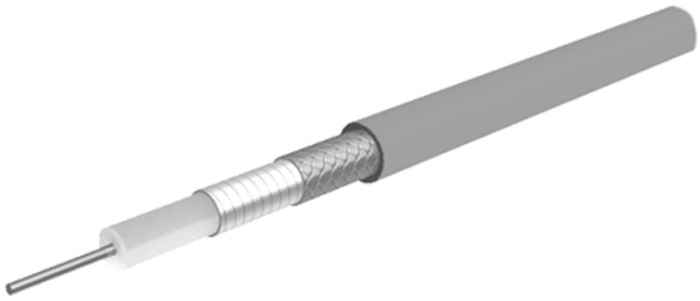
HUBER+SUHNER

Flexible microwave cable
SUCOFLEX_106 Item: 22511150 Only as Assembly

Description

SUCOFLEX 100: The flexible, high-performance microwave assemblies

50 Ohm, 18 GHz, 165°C, ø7.9 mm, FEP jacket



Technical Data

Construction

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

Electrical Data

Impedance		50 Ω +/- 1
Operating Frequency		18 GHz
Capacitance		87 pF/m
Velocity of signal propagation		77 %
Signal delay		4.3 ns/m
Screening effectiveness		≥ 90 dB (up to 18 GHz)
Operating voltage		≤ 3.8 kV_{rms} (at sea level)

Mechanical Data

Weight		14.5 kg/100 m
Min. bending radius	static	24 mm
	dynamic	40 mm

Environmental Data

Temperature range	-55 °C ... +165 °C
Flame propagation test	MIL-T-87104 § 4.6.4.8,
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

Additional Information

Remarks

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

Suitable Connectors

Cable group	U98 SUCOFLEX

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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 = 0.15	b = 0.0071	f_{max} = 18	P at 1GHz = 1582

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 (W) sea level 40° C ambient temperature
0,9	0,15	0,045	1668
1,8	0,21	0,065	1179
2,7	0,27	0,081	963
3,6	0,31	0,095	834
4,5	0,35	0,107	746
5,4	0,39	0,118	681
6,3	0,42	0,128	630
7,2	0,45	0,138	590
8,1	0,48	0,148	556
9,0	0,51	0,157	527
9,9	0,54	0,165	503
10,8	0,57	0,174	481
11,7	0,6	0,182	463
12,6	0,62	0,190	446
13,5	0,65	0,197	431
14,4	0,67	0,205	417
15,3	0,7	0,212	404
16,2	0,72	0,219	393
17,1	0,74	0,226	383
18,0	0,76	0,233	373

Waiver: Fact and figures herein are for information only and do not represent any warranty of any kind.