Data Sheet

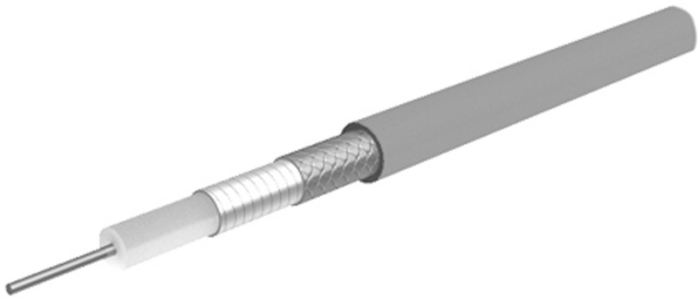
HUBER+SUHNER

Flexible microwave cable
SUCOFLEX_101_P Item: 22512205 Only as Assembly

Description

SUCOFLEX 100: The flexible, high-performance microwave assemblies

High-flexible, 50 Ohm, 50 GHz, 165°C, ø3.65 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	
Dielectric	PTFE-LD		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5000 - bl	3.65 mm

Electrical Data

Impedance		50 Ω
Operating Frequency		50 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		≤ 1.2 kV_{rms} (at sea level)

Mechanical Data

Weight		3.3 kg/100 m
Min. bending radius	static	11 mm
	dynamic	20 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 =	0.5758	b =	0.0285	f_{max} =	50	P at 1GHz =	275

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
2.5	0.98	0.299	174
5.0	1.43	0.436	123
7.5	1.79	0.546	100
10.0	2.11	0.642	87
12.5	2.39	0.729	78
15.0	2.66	0.810	71
17.5	2.91	0.886	66
20.0	3.15	0.959	61
22.5	3.37	1.028	58
25.0	3.59	1.095	55
27.5	3.8	1.159	52
30.0	4.01	1.222	50
32.5	4.21	1.283	48
35.0	4.4	1.342	46
37.5	4.59	1.400	45
40.0	4.78	1.457	43
42.5	4.97	1.513	42
45.0	5.15	1.568	41
47.5	5.32	1.622	40
50.0	5.5	1.675	39

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