Data Sheet

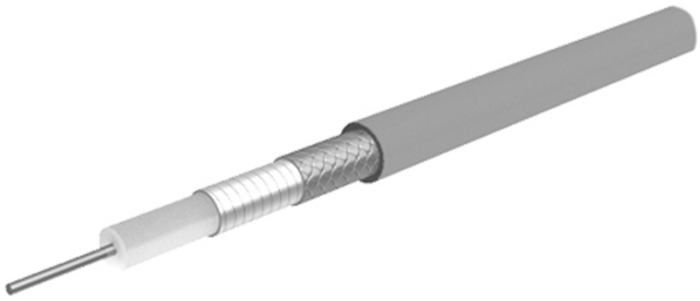
HUBER+SUHNER

Flexible microwave cable
SUCOFLEX_101 Item: 22511915 Only as Assembly

Description

SUCOFLEX 100: The flexible, high-performance microwave assemblies

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



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	
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		3.56 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 = 0.4255	b = 0.01	f_{max} = 50	P at 1GHz = 296

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	0,7	0,213	187
5,0	1,0	0,305	132
7,5	1,24	0,378	108
10,0	1,45	0,441	94
12,5	1,63	0,497	84
15,0	1,8	0,548	76
17,5	1,95	0,596	71
20,0	2,1	0,641	66
22,5	2,24	0,684	62
25,0	2,38	0,725	59
27,5	2,51	0,764	56
30,0	2,63	0,802	54
32,5	2,75	0,838	52
35,0	2,87	0,874	50
37,5	2,98	0,908	48
40,0	3,09	0,942	47
42,5	3,2	0,975	45
45,0	3,3	1,007	44
47,5	3,41	1,039	43
50,0	3,51	1,069	42

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