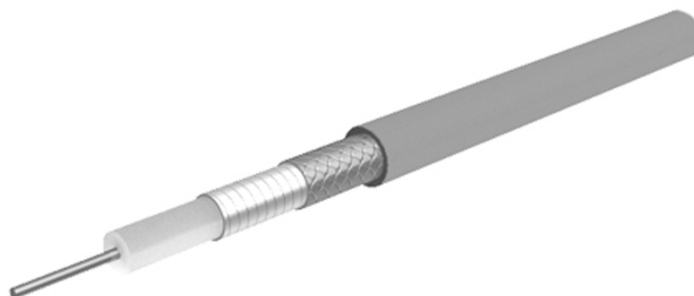


Flexible microwave cable SUCOFLEX_101_P

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

Ordering Information

Order as	SUCOFLEX_101_P (available only as assembly)
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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: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.5758

b = 0.0285

f_{max} = 50

P at 1GHz = 275

Frequency (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
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