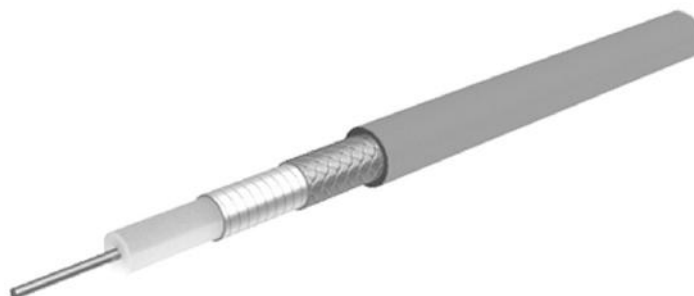


Flexible microwave cable SUCOFLEX_118

Description

SUCOFLEX 100: The flexible, high-performance microwave assemblies

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



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand, Low-loss	
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

Ordering Information

Order as	SUCOFLEX_118 (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 = 0.15

b = 0.0071

f_{max} = 18

P at 1GHz = 1582

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
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