

Coaxial Cable SUCOFLEX_106

Description

SUCOFLEX 100, the flexible, high performance microwave cable



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
Insulation resistance	≥ 1 x 10 ⁸ MΩm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 3.8 kV _{rms} (at sea level)

Mechanical Data

Weight		14.2 kg/100 m
Min. bending radius	static	24 mm
	dynamic	40 mm

Environmental Data

Temperature range	-55 °C... +165 °C
Flammability	MIL-T-87104 § 4.6.4.8, ,
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as SUCOFLEX_106 (available only as assembly)

Remarks

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

Suitable Connectors

Cable group U98 SUCOFLEX

Coaxial Cable SUCOFLEX_106

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 (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) 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