



# SUHNER® MICROWAVE CABLE DATA SHEET

## TYPE SF 106

**SUCOFLEX 100, the flexible, high performance microwave cable**

### Cable Design



	<b>Material</b>	<b>Detail</b>	<b>Diameter</b>
Centre conductor:	<i>CuAg</i>	<i>Wire</i>	
Dielectric:	<i>LDPTFE</i>		
1. Outer conductor:	<i>CuAg wrapped Foil</i>	<i>100% coverage</i>	
2. Outer conductor:	<i>CuAg Braid</i>		
Jacket:	<i>FEP</i>	<i>RAL 5000 - bl</i>	<i>7.9 mm</i>

### Electrical Data

Impedance:	<i>50</i>	$\Omega$
Max. operating frequency:	<i>18</i>	GHz
Capacitance:	<i>87</i>	pF / m
Velocity of signal propagation:	<i>77</i>	%
Signal delay:	<i>4.3</i>	ns / m
Min. screening effectiveness:	<i>&gt; 90</i>	dB (up to 18 GHz)
Max. operating voltage:	<i>3.8</i>	kV <sub>rms</sub> (at sea level)

### General Data

Temperature range:		<i>-55 °C...+ 165 °C</i>
Weight:		<i>15.7 kg / 100 m</i>
Min. bending radius :	<i>static</i>	<i>24 mm</i>
	<i>dynamic</i>	<i>40 mm</i>

### Suitable Connectors

Cable group *n/a*  
(for details refer to the "SUHNER Microwave Cables and Assemblies General Catalogue" or contact you nearest HUBER+SUHNER partner)

### Notes

Order as **SF 106** (available only as assembly)

#### WAIVER!

While the information contained in this folder has been carefully compiled to the best of our present knowledge, it is not intended as representation or warranty of any kind on our part regarding the fitness of the products concerned for any particular use or purpose and neither shall any statement contained herein be construed as a recommendation to infringe any industrial property rights or as a license to use any such rights. The fitness of each product for any particular purpose must be checked beforehand with our specialists.



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**Matrix**      **Attenuation** [formula :  $(a \cdot f^{0.5} + b \cdot f)$ ] and **Power CW** [formula :  $(p \cdot f^{0.5})$ ]

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
0.5	0.11	0.034	2237
1	0.16	0.049	1582
2	0.23	0.070	1119
3	0.28	0.085	913
4	0.33	0.101	791
5	0.37	0.113	707
6	0.41	0.125	646
7	0.45	0.137	598
8	0.48	0.146	559
9	0.51	0.155	527
10	0.55	0.168	500
11	0.58	0.177	477
12	0.60	0.183	457
13	0.63	0.192	439
14	0.66	0.201	423
15	0.69	0.210	408
16	0.71	0.216	396
17	0.74	0.226	384
18	0.76	0.232	373

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