



# SUHNER® MICROWAVE CABLE DATA SHEET

## TYPE SF 101

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

### Cable Design



	Material	Detail	Diameter
Centre conductor:	CuAg	Wire	
Dielectric:	LDPTFE		
1. Outer conductor:	CuAg wrapped Foil	100% coverage	
2. Outer conductor:	CuAg Braid		
Jacket:	FEP	RAL 5000 - bl	3.5 mm

### Electrical Data

Impedance:	50	Ω
Max. operating frequency:	50	GHz
Capacitance:	87	pF / m
Velocity of signal propagation:	77	%
Signal delay:	4.3	ns / m
Min. screening effectiveness:	> 90	dB (up to 18 GHz)
Max. operating voltage:	1.2	kV <sub>rms</sub> (at sea level)

### General Data

Temperature range:	-55 °C...+ 165 °C
Weight:	3.56 kg / 100 m
Min. bending radius :	static 11 mm
	dynamic 20 mm

### 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 101** (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\*f^0.5 +b\*f) ] and **Power CW** [formula : (p\*/f^0.5) ]

Coefficients:

a= 0.4255

b= 0.01

f<sub>max.</sub>= 50

p<sub>at 1GHz</sub> = 296

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
1	0.44	0.134	296
3	0.77	0.235	171
4	0.89	0.271	148
6	1.10	0.335	121
7	1.20	0.366	112
9	1.37	0.418	99
10	1.45	0.442	94
12	1.59	0.485	85
14	1.73	0.527	79
15	1.80	0.549	76
17	1.92	0.585	72
18	1.99	0.607	70
20	2.10	0.640	66
21	2.16	0.658	65
23	2.27	0.692	62
25	2.38	0.725	59
26	2.43	0.741	58
28	2.53	0.771	56
29	2.58	0.786	55
31	2.68	0.817	53
32	2.73	0.832	52
34	2.82	0.859	51
35	2.87	0.875	50
37	2.96	0.902	49
39	3.05	0.930	47
40	3.09	0.942	47
42	3.18	0.969	46
43	3.22	0.981	45
45	3.30	1.006	44
46	3.35	1.021	44
48	3.43	1.045	43
50	3.51	1.070	42

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