

## **SUHNER® MICROWAVE CABLE DATA SHEET**

### TYPE SM 86

SUCOFORM, the handformable microwave cable

#### **Cable Design**

	Material	Detail	Diameter
Centre conductor:	StCuAg	Wire	0.53 mm
Dielectric:	PTFE		<i>1.65</i> mm
<ol> <li>Outer conductor:</li> </ol>	CuSn Tin soaked braid	100% coverage	2.1 mm

Print: SUHNER SUCOFORM 86 (Batch no.)

#### **Electrical Data**

Impedance:		50	Ω
Max. operating frequency:		18	GHz
Capacitance:		95	pF/m
Velocity of signal propagation:		71	%
Signal delay:		4.7	ns / m
Min. screening effectiveness:	>	100	dB (up to 18 GHz)
Max. operating voltage:		1.5	kV <sub>rms</sub> (at sea level)

### **General Data**

Temperature range:		-65°	с+ <i>165</i> °с
Weight:		1.5	kg / 100 m
Min. bending radius:	static	6	mm
	repeated (for max. 50 bendings)	20	mm

#### **Suitable Connectors**

Cable group Y3 / Y11

(for details refer to the "SUHNER Microwave Cables and Assemblies General Catalogue" or contact you nearest HUBER+SUHNER partner)

#### **Notes**

#### Order as SM 86 under article number 22511613

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<u>uncontrolled copy</u> Page 1



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

Coefficients:

a= 0.6283  $f_{\text{max}}=18$  $p_{\text{at 1GHz}} = 162$ b = 0.04

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
. (GHz)	(dB / m)	(dB / ft)	(watt)
	sea level	sea level	sea level
	25° C ambient temperature	25° C ambient temperature	40° C ambient temperature
0.5	0.46	0.140	229
1	0.67	0.204	162
2	0.97	0.296	115
3	1.21	0.369	94
4	1.42	0.433	81
5	1.60	0.488	72
6	1.78	0.543	66
7	1.94	0.591	61
8	2.10	0.640	57
9	2.24	0.683	54
10	2.39	0.728	51
11	2.52	0.768	49
12	2.66	0.811	47
13	2.79	0.850	45
14	2.91	0.887	43
15	3.03	0.923	42
16	3.15	0.960	41
17	3.27	0.997	39
18	3.39	1.033	38

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