



# SUHNER® MICROWAVE CABLE DATA SHEET

## TYPE SM 86 PE

**SUCOFORM**, the handformable microwave cable with protective jacket

### Cable Design



	Material	Detail	Diameter
Centre conductor:	StCuAg	Wire	0.53 mm
Dielectric:	PTFE		1.65 mm
1. Outer conductor:	CuSn Tin soaked braid	100% coverage	2.1 mm
Jacket:	PE	RAL 3004 - rd	3.2 mm
Print:	SUHNER SUCOFORM 86 PE (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:	-40 °C...+ 85 °C
Weight:	1.7 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 PE** under article number **22511631**

#### WAIVER!

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**HUBER+SUHNER**

HUBER+SUHNER AG  
Interconnect Division  
CH-9100 Herisau  
Phone +41 (0)71 353 41 11  
Fax +41 (0)71 353 45 90  
<http://www.hubersuhner.com>

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

Coefficients:

a= 0.6283

b= 0.04

f<sub>max</sub>= 18

p<sub>at 1GHz</sub> = 30

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	0.46	0.140	42
1	0.67	0.204	30
2	0.97	0.296	21
3	1.21	0.369	17
4	1.42	0.433	15
5	1.60	0.488	13
6	1.78	0.543	12
7	1.94	0.591	11
8	2.10	0.640	11
9	2.24	0.683	10
10	2.39	0.728	9
11	2.52	0.768	9
12	2.66	0.811	9
13	2.79	0.850	8
14	2.91	0.887	8
15	3.03	0.923	8
16	3.15	0.960	8
17	3.27	0.997	7
18	3.39	1.033	7

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