



# SUHNER® MICROWAVE CABLE DATA SHEET

## TYPE SM 141 PE

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

### Cable Design



	Material	Detail	Diameter
Centre conductor:	StCuAg	Wire	0.95 mm
Dielectric:	PTFE		2.95 mm
1. Outer conductor:	CuSn Tin soaked braid	100% coverage	3.58 mm
Jacket:	PE	RAL 3004 - rd	4.6 mm
Print:	SUHNER SUCOFORM 141 PE (Batch no.)		

### Electrical Data

Impedance:	50	Ω
Max. operating frequency:	18	GHz
Capacitance:	94	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:	1.9	kV <sub>rms</sub> (at sea level)

### General Data

Temperature range:	-40 °C...+ 85 °C
Weight:	4.7 kg / 100 m
Min. bending radius :	static 8 mm
	repeated (for max. 50 bendings) 40 mm

### Suitable Connectors

Cable group	Y5 / Y12
(for details refer to the "SUHNER Microwave Cables and Assemblies General Catalogue" or contact you nearest HUBER+SUHNER partner)	

### Notes

Order as **SM 141 PE** under article number **22511632**

#### WAIVER!

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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= 0.355

b= 0.04

f<sub>max</sub>= 18

p<sub>at 1GHz</sub> = 90

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	0.27	0.082	127
1	0.40	0.122	90
2	0.58	0.177	64
3	0.73	0.222	52
4	0.87	0.265	45
5	0.99	0.302	40
6	1.11	0.338	37
7	1.22	0.372	34
8	1.32	0.402	32
9	1.43	0.436	30
10	1.52	0.463	28
11	1.62	0.494	27
12	1.71	0.521	26
13	1.80	0.549	25
14	1.89	0.576	24
15	1.97	0.600	23
16	2.06	0.628	23
17	2.14	0.652	22
18	2.23	0.680	21

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