



# SUHNER® MICROWAVE CABLE DATA SHEET

## TYPE SM\_141CU

**SUCOFORM, the handformable microwave cable**

### Cable Design



	Material	Detail	Diameter
Centre conductor:	Copper: Silver Plated	Wire	
Dielectric:	PTFE (Polytetrafluorethyl.)		
1. Outer conductor:	Copper: Tin Plated Tin soaked braid		100% coverage
Print:	SUHNER SUCOFORM 141 Cu (Batch no.)		

### Electrical Data

Impedance:	50	$\Omega$
Max. operating frequency:	18	GHz
Capacitance:	92	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:	-65 °C...+ 165 °C
Weight:	4 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 your nearest HUBER+SUHNER partner)	

### Notes

Order as **SM\_141CU** (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 :  $(p^* / f^{0.5})$ ]

Coefficients:

a= 0.355

b= 0.04

$f_{\max} = 18$

$p_{\text{at } 1\text{GHz}} = 425$

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	601
1	0.40	0.122	425
2	0.58	0.177	301
3	0.73	0.222	245
4	0.87	0.265	213
5	0.99	0.302	190
6	1.11	0.338	174
7	1.22	0.372	161
8	1.32	0.402	150
9	1.43	0.436	142
10	1.52	0.463	134
11	1.62	0.494	128
12	1.71	0.521	123
13	1.80	0.549	118
14	1.89	0.576	114
15	1.97	0.600	110
16	2.06	0.628	106
17	2.14	0.652	103
18	2.23	0.680	100

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