



SUHNER® MICROWAVE CABLE DATA SHEET

TYPE SM 86 FEP

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:	FEP	RAL 3027 - rd	2.5 mm
Print:	SUHNER SUCOFORM 86 FEP (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 _{rms} (at sea level)

General Data

Temperature range:	-65 °C...+ 165 °C
Weight:	1.8 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 FEP** under article number **22511942**

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 constructed 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 : $(p^2 / f^{0.5})$]

Coefficients:

a= 0.6283

b= 0.04

f_{max}= 18

p_{at 1GHz} = 280

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	396
1	0.67	0.204	280
2	0.97	0.296	198
3	1.21	0.369	162
4	1.42	0.433	140
5	1.60	0.488	125
6	1.78	0.543	114
7	1.94	0.591	106
8	2.10	0.640	99
9	2.24	0.683	93
10	2.39	0.728	89
11	2.52	0.768	84
12	2.66	0.811	81
13	2.79	0.850	78
14	2.91	0.887	75
15	3.03	0.923	72
16	3.15	0.960	70
17	3.27	0.997	68
18	3.39	1.033	66

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