

Formable microwave cable

SUCOFORM_141_75_FEP Item: 22512290

Description

Sucoform: Formstable, hand-formable alternatives to semi-rigid microwave cables

75 Ohm, 4 GHz, 165°C, ø4.1 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.52 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 100%	3.58 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 3020 - rd	4.1 mm +/- 0.1

Print: HUBER+SUHNER SUCOFORM 141 75 FEP 75 Ohm (PA no.)

Electrical Data

Impedance	75 Ω +/- 2
Operating Frequency	4 GHz
Capacitance	62 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Screening effectiveness	≥ 100 dB (up to 4 GHz)
Operating voltage	≤ 1.9 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.5 kg/100 m
Min. bending radius	static	8 mm
	repeated (for ≤ 50 bendings)	40 mm

Environmental Data

Temperature range	-65 °C ... +165 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-1, UL 1581 § 1080 (VW-1)
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant
2000/53/EC (ELV)	compliant
2012/19/EU (WEEE)	no special marking needed

Additional Information

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group U99 Customer Specific

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

Coefficients:

a = 0.4457

b = 0.01086

f_{max} = 4

P at 1GHz = 426

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 (W) sea level 40° C ambient temperature
0,2	0,2	0,061	953
0,4	0,29	0,087	674
0,6	0,35	0,107	550
0,8	0,41	0,124	476
1,0	0,46	0,139	426
1,2	0,5	0,153	389
1,4	0,54	0,165	360
1,6	0,58	0,177	337
1,8	0,62	0,188	318
2,0	0,65	0,199	301
2,2	0,68	0,209	287
2,4	0,72	0,218	275
2,6	0,75	0,228	264
2,8	0,78	0,237	255
3,0	0,8	0,245	246
3,2	0,83	0,254	238
3,4	0,86	0,262	231
3,6	0,88	0,270	225
3,8	0,91	0,277	219
4,0	0,93	0,285	213