

Formable microwave cable

SUCOFORM_141_PE Item: 22511632

Description

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

RG402 dimension, 50 Ohm, 33 GHz, 85°C, ø4.6 mm, PE jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.95 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 100%	3.58 mm
Jacket	PE (Polyethylene)	RAL 3004 - rd	4.6 mm +/- 0.1

Print: HUBER+SUHNER SUCOFORM 141 PE 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	33 GHz
Capacitance	92 pF/m
Velocity of signal propagation	71 %
Signal delay	4.7 ns/m
Screening effectiveness	≥ 100 dB (up to 18 GHz)
Operating voltage	≤ 1.9 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		4.7 kg/100 m
Min. bending radius	static	8 mm
	repeated (for ≤ 50 bendings)	40 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
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	Y12 3 mm / 50 Ohm
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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 = 0.355

b = 0.04

$f_{\max} = 33$

P at 1GHz = 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 (W) sea level 40° C ambient temperature
1,65	0,52	0,159	70
3,3	0,78	0,237	50
4,95	0,99	0,301	40
6,6	1,18	0,358	35
8,25	1,35	0,411	31
9,9	1,51	0,461	29
11,55	1,67	0,509	26
13,2	1,82	0,554	25
14,85	1,96	0,598	23
16,5	2,1	0,641	22
18,15	2,24	0,682	21
19,8	2,37	0,723	20
21,45	2,5	0,763	19
23,1	2,63	0,802	19
24,75	2,76	0,840	18
26,4	2,88	0,878	18
28,05	3,0	0,915	17
29,7	3,12	0,952	17
31,35	3,24	0,988	16
33,0	3,36	1,024	16