# **Data Sheet**



Formable microwave cable SUCOFORM 141 Item: 22511925

# **Description**

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

RG402 dimension, 50 Ohm, 33 GHz, 165°C, ø3.58 mm, no jacket



# **Technical Data**

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.94 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Tin soaked braid, 99%	3.58 mm

Print: HUBER+SUHNER SUCOFORM 141 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<sub>rms</sub> (at sea level) 5 kV<sub>rms</sub> (50 Hz/1 min) Test voltage

## **Mechanical Data**

Weight \$\$ 4 kg/100 m\$\$ Min. bending radius \$\$ static \$8 mm\$\$ repeated (for \$\leq 50 \ bendings)\$\$ 40 mm\$\$

#### **Environmental Data**

Temperature range  $-65 \, ^{\circ}\text{C} \dots +165 \, ^{\circ}\text{C}$  Installation temperature  $-20 \, ^{\circ}\text{C} \dots +60 \, ^{\circ}\text{C}$  Flame propagation test  $\text{IEC } 60332\text{-1, UL } 1581 \, \S \, 1080 \, (\text{VW-1})$ 

 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 Y12 3 mm / 50 Ohm

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

Coefficients:

a = 0.355 b = 0.04  $f_{max} = 33$  P at 1GHz = 425

Frequency	Nom. attenuation	Nom. attenuation	Max. CW powe
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
1,65	0,52	0,159	331
3,3	0,78	0,237	234
4,95	0,99	0,301	191
6,6	1,18	0,358	165
8,25	1,35	0,411	148
9,9	1,51	0,461	135
11,55	1,67	0,509	125
13,2	1,82	0,554	117
14,85	1,96	0,598	110
16,5	2,1	0,641	105
18,15	2,24	0,682	100
19,8	2,37	0,723	96
21,45	2,5	0,763	92
23,1	2,63	0,802	88
24,75	2,76	0,840	85
26,4	2,88	0,878	83
28,05	3,0	0,915	80
29,7	3,12	0,952	78
31,35	3,24	0,988	76
33,0	3,36	1,024	74

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