

## Formable microwave cable

SR\_141\_M17 Item: 22810041

### Description

Semi-rigid: Semi-rigid, formable microwave cables

RG402 dimension, MIL style, 50 Ohm, 33 GHz, 125°C, ø3.58 mm, no jacket



### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.92 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.99 mm
Outer conductor	Copper	Tube, 100%	3.58 mm

#### Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	33 GHz
Capacitance	98.1 pF/m
Velocity of signal propagation	69.5 %
Signal delay	4.8 ns/m
Screening effectiveness	≥ 120 dB (up to 18 GHz)
Operating voltage	≤ 1.9 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	5.12 kg/100 m
Min. bending radius	static 6.35 mm

#### Environmental Data

Temperature range	-55 °C ... +125 °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	Y5 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 = 0.32544

b = 0.03967

f<sub>max</sub> = 33

P at 1GHz = 450

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	0.48	0.147	350
3.3	0.72	0.220	248
4.95	0.92	0.281	202
6.6	1.1	0.335	175
8.25	1.26	0.385	157
9.9	1.42	0.432	143
11.55	1.56	0.477	132
13.2	1.71	0.520	124
14.85	1.84	0.562	117
16.5	1.98	0.602	111
18.15	2.11	0.642	106
19.8	2.23	0.681	101
21.45	2.36	0.719	97
23.1	2.48	0.756	94
24.75	2.6	0.793	90
26.4	2.72	0.829	88
28.05	2.84	0.864	85
29.7	2.95	0.900	83
31.35	3.07	0.934	80
33.0	3.18	0.969	78