

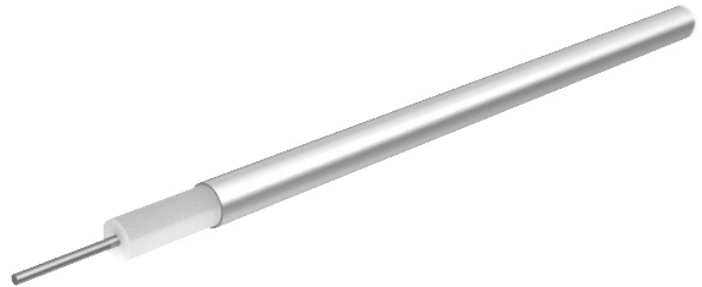
Formable microwave cable

SR_47_M17 Item: 22810500

Description

Semi-rigid: Semi-rigid, formable microwave cables

MIL style, 50 Ohm, 107 GHz, 100°C, ø1.19 mm, no jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.29 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.93 mm
Outer conductor	Copper	Tube, 100%	1.19 mm

Electrical Data

Impedance	50 Ω +/- 2.5
Operating Frequency	107 GHz
Capacitance	105 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 kV _{rms} (at sea level)

Mechanical Data

Weight	0.71 kg/100 m
Min. bending radius	static 3.18 mm

Environmental Data

Temperature range	-55 °C ... +100 °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	Y15 1 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 = 1.04044

b = 0.03967

f_{max} = 107

P at 1GHz = 32

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
5.35	2.62	0.798	14
10.7	3.83	1.167	10
16.05	4.8	1.464	8
21.4	5.66	1.726	7
26.75	6.44	1.964	6
32.1	7.17	2.185	6
37.45	7.85	2.393	5
42.8	8.5	2.592	5
48.15	9.13	2.783	5
53.5	9.73	2.966	4
58.85	10.32	3.144	4
64.2	10.88	3.317	4
69.55	11.44	3.486	4
74.9	11.98	3.650	4
80.25	12.5	3.811	4
85.6	13.02	3.969	3
90.95	13.53	4.124	3
96.3	14.03	4.276	3
101.65	14.52	4.426	3
107.0	15.01	4.574	3