

Flexible RF cable

G_02232-09 Item: 22510110

Description

G: RF cables with PE dielectrics

RG174 (alternative materials, grey jacket), 50 Ohm, 1 GHz, 85°C, ø2.55 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Strand-07	0.49 mm
Dielectric	PE (Polyethylene)		1.5 mm
Outer conductor	Copper	Braid, 96%	2 mm
Jacket	PVC (Polyvinyl chloride)	RAL 7035 - gr	2.55 mm +/- 0.13

Print: No print on jacket

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 40 dB (up to 1 GHz)
Operating voltage	≤ 1.5 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		1.3 kg/100 m
Min. bending radius	static	13 mm 25 mm

Environmental Data

Temperature range	-25 °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

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 U2 2 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 = 0.867

b = 0.1289

$f_{\max} = 1$

P at 1GHz = 38

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
0,05	0,2	0,061	170
0,1	0,29	0,087	120
0,15	0,36	0,108	98
0,2	0,41	0,126	85
0,25	0,47	0,142	76
0,3	0,51	0,157	69
0,35	0,56	0,170	64
0,4	0,6	0,183	60
0,45	0,64	0,195	57
0,5	0,68	0,206	54
0,55	0,71	0,218	51
0,6	0,75	0,228	49
0,65	0,78	0,239	47
0,7	0,82	0,249	45
0,75	0,85	0,258	44
0,8	0,88	0,268	42
0,85	0,91	0,277	41
0,9	0,94	0,286	40
0,95	0,97	0,295	39
1,0	1,0	0,304	38