

Flexible RF cable

G_02232_D Item: 22510112

Description

G: RF cables with PE dielectrics

RG174D/RD174 alternative, 50 Ohm, 6 GHz, 85°C, ø3.1 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
Outer conductor	Copper	Braid, 93 %	2.5 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	3.1 mm +/- 0.1

Print: HUBER+SUHNER G 02232 D 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 78 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		2.1 kg/100 m
Min. bending radius	static	15 mm
		30 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	U4 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 = 0.7616

b = 0.1325

f_{max} = 6

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
0,3	0,46	0,139	69
0,6	0,67	0,204	49
0,9	0,84	0,257	40
1,2	0,99	0,303	35
1,5	1,13	0,345	31
1,8	1,26	0,384	28
2,1	1,38	0,421	26
2,4	1,5	0,457	25
2,7	1,61	0,490	23
3,0	1,72	0,523	22
3,3	1,82	0,555	21
3,6	1,92	0,586	20
3,9	2,02	0,616	19
4,2	2,12	0,645	19
4,5	2,21	0,674	18
4,8	2,3	0,702	17
5,1	2,4	0,730	17
5,4	2,49	0,757	16
5,7	2,57	0,784	16
6,0	2,66	0,811	16