

Flexible RF cable

G_03212_D-01 **Item: 22512305**

Description

G: RF cables with PE dielectrics

RG223 High-flexible alternative, 50 Ohm, 6 GHz, 85°C, ø5.4 mm, PUR jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96%	3.6 mm
Outer conductor	Copper, Tin plated	Braid, 94 %	4.2 mm
Jacket	PUR (Polyurethane)	RAL 9005 - bk	5.4 mm +/- 0.1

Print: HUBER+SUHNER G 03212 D-01 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	100.7 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 80 dB (up to 6 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		5.3 kg/100 m
Min. bending radius	static	30 mm
		55 mm

Environmental Data

Temperature range	-40 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen test	IEC 60754
Halogen free	Yes
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	U9 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 = 0.3336

b = 0.2018

f_{max} = 6

P at 1GHz = 110

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,3	0,24	0,074	201
0,6	0,38	0,116	142
0,9	0,5	0,152	116
1,2	0,61	0,185	100
1,5	0,71	0,217	90
1,8	0,81	0,247	82
2,1	0,91	0,277	76
2,4	1,0	0,305	71
2,7	1,09	0,333	67
3,0	1,18	0,361	64
3,3	1,27	0,388	61
3,6	1,36	0,414	58
3,9	1,45	0,441	56
4,2	1,53	0,467	54
4,5	1,62	0,492	52
4,8	1,7	0,518	50
5,1	1,78	0,543	49
5,4	1,86	0,568	47
5,7	1,95	0,593	46
6,0	2,03	0,618	45