

Flexible RF cable

RG_223_/U **Item: 22510072**

Description

RG: RG type RF cables

RG223, 50 Ohm, 6 GHz, 85°C, ø5.4 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.88 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 96%	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	5.4 mm +/- 0.1

Print: HUBER+SUHNER RG 223 U 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 1
Operating Frequency	6 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5 ns/m
Screening effectiveness	≥ 85 dB (up to 1 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	5.5 kg/100 m
Min. bending radius	static 30 mm 54 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

MIL reference: M17/194-00001 (former reference: M17/84-RG223)

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 = 0.3756

b = 0.0749

f_{max} = 6

P at 1GHz = 120

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	0,23	0,070	219
0,6	0,34	0,102	155
0,9	0,42	0,129	126
1,2	0,5	0,153	110
1,5	0,57	0,174	98
1,8	0,64	0,195	89
2,1	0,7	0,214	83
2,4	0,76	0,232	77
2,7	0,82	0,250	73
3,0	0,88	0,267	69
3,3	0,93	0,283	66
3,6	0,98	0,299	63
3,9	1,03	0,315	61
4,2	1,08	0,330	59
4,5	1,13	0,346	57
4,8	1,18	0,360	55
5,1	1,23	0,375	53
5,4	1,28	0,389	52
5,7	1,32	0,403	50
6,0	1,37	0,417	49