

Flexible RF cable RG_223_/U-02

Description

RG: RG type RF cables

RG223 High-flexible, 50 Ohm, 6 GHz, 85°C, ø5.3 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.93 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	5.3 mm +/- 0.15

Print: HUBER+SUHNER RG 223 U-02 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	≥ 83 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		5.3 kg/100 m
Min. bending radius	static	26 mm
	dynamic	53 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)

Ordering Information

Order as RG_223_/U-02

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 = 0.501

b = 0.067

$f_{max} = 6$

P at 1GHz = 120

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	0,29	0,090	219
0,6	0,43	0,131	155
0,9	0,54	0,163	126
1,2	0,63	0,192	110
1,5	0,71	0,218	98
1,8	0,79	0,242	89
2,1	0,87	0,264	83
2,4	0,94	0,286	77
2,7	1,0	0,306	73
3,0	1,07	0,326	69
3,3	1,13	0,345	66
3,6	1,19	0,363	63
3,9	1,25	0,381	61
4,2	1,31	0,399	59
4,5	1,36	0,416	57
4,8	1,42	0,433	55
5,1	1,47	0,449	53
5,4	1,53	0,465	52
5,7	1,58	0,481	50
6,0	1,63	0,497	49