

Flexible RF cable

RG_223_/U-60 Item: 22511565

Description

RG: RG type RF cables

RG223, 50 Ohm, 6 GHz, 85°C, ø5.4 mm, PVC jacket, UL AWM style 1354



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.88 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	PVC (Polyvinyl chloride)	RAL 7032 - gr	5.4 mm +/- 0.1

Print: HUBER+SUHNER RG 223 U-60 50 Ohm (UL logo) AWM Style 1354 (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	≥ 85 dB (up to 6 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)
Voltage Rating UL	30 V

Mechanical Data

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

Environmental Data

Temperature range	-25 °C ... +85 °C
Temperature rating UL	60 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	UL (horizontal flame test),
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 = 0.3935

b = 0.0841

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	0,24	0,073	219
0,6	0,36	0,108	155
0,9	0,45	0,137	126
1,2	0,53	0,162	110
1,5	0,61	0,185	98
1,8	0,68	0,207	89
2,1	0,75	0,228	83
2,4	0,81	0,247	77
2,7	0,87	0,266	73
3,0	0,93	0,285	69
3,3	0,99	0,302	66
3,6	1,05	0,320	63
3,9	1,11	0,337	61
4,2	1,16	0,353	59
4,5	1,21	0,370	57
4,8	1,27	0,386	55
5,1	1,32	0,402	53
5,4	1,37	0,417	52
5,7	1,42	0,432	50
6,0	1,47	0,448	49