

RG223, 50Ω, 6 GHz, 85°C, Ø5.3 mm, PVC jacket

RG_223_/U-02

Properties

- Highly flexible version of RG_223
- Excellent RF performance for precision applications
- Suitable for use in application up to 6 GHz



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19, 96%	0.9 mm - 0.15 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 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 6 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	83 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	27.9 Ω/km
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 53 g/m
Static bending radius	≥ 26 mm
Dynamic bending radius	< 53 mm

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Environmental data	
Operation temperature	-25 °C ... 85 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	contains halogene

Additional Information

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

Suitable connectors

Cable group U9

Ordering information

Item number	Item description	Available as assembly only
22610106	RG_223_/U-02	No

Power Matrix

Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]

a coefficient typical =	0.501	b coefficient typical =	0.067
fmax =	6.0	P at 1 GHz =	120.0

Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.10	0.165	0.050	379
0.20	0.237	0.072	268
0.30	0.295	0.090	219
0.40	0.344	0.105	190
0.60	0.428	0.130	155
0.80	0.502	0.153	134
1.00	0.568	0.173	120
1.20	0.629	0.192	110
1.40	0.687	0.209	101
1.60	0.741	0.226	95
1.80	0.793	0.242	89
2.00	0.843	0.257	85
2.50	0.960	0.293	76
3.00	1.069	0.326	69
3.50	1.172	0.357	64
4.00	1.270	0.387	60
4.50	1.364	0.416	57
5.00	1.455	0.443	54
5.50	1.543	0.470	51
6.00	1.629	0.497	49

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