

RG223 alternative, 50 Ohm, 6 GHz, 85°C, ø5.35 mm, PVC jacket

G_03232_D-01

Properties

- Custom version of standard RG cable
- Suitable for use in applications up to 6 GHz
- Highly flexible



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19, RAL 9005 - bk	0.9 mm - 0.15 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 95%	3.6 mm
Outer conductor	Copper, Tin plated	Braid, 93%	4.25 mm
Jacket	PVC (Polyvinyl chloride)	RAL 9005 - bk	5.35 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	78 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	38.6 Ω/km
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 57 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	50 mm

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Environmental data			
Operation temperature		-25 °C ... 85 °C	
Installation temperature		-20 °C ... 60 °C	
Fire characteristics		contains halogene	
Suitable connectors			
Cable group		U9	
Ordering information			
Item number		Item description	Available as assembly only
22510134		G_03232_D-01	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 =	0.4003	b coefficient typical =	0.1637
fmax =	6	P at 1 GHz =	110
Frequency	Nom. attenuation	Nom. attenuation	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
0.10	0.143	0.044	348
0.20	0.212	0.065	246
0.30	0.268	0.082	201
0.40	0.319	0.097	174
0.60	0.408	0.124	142
0.80	0.489	0.149	123
1.00	0.564	0.172	110
1.20	0.635	0.194	100
1.40	0.703	0.214	93
1.60	0.768	0.234	87
1.80	0.832	0.254	82
2.00	0.894	0.272	78
2.50	1.042	0.318	70
3.00	1.184	0.361	64
3.50	1.322	0.403	59
4.00	1.455	0.444	55
4.50	1.586	0.483	52
5.00	1.714	0.522	49
5.50	1.839	0.561	47
6.00	1.963	0.598	45

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