

RG174 alternative, 50 Ohm, 1 GHz, 85°C, ø2.55 mm, PVC jacket

G_02232-09

Properties

- Custom version of RG_174
- Grey jacket



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper	Strand-07, RAL 7035 - gr	0.49 mm - 0.13 mm
Dielectric	PE (Polyethylene)		1.5 mm
Outer conductor	Copper	Braid, 96%	2 mm
Jacket	PVC (Polyvinyl chloride)	RAL 7035 - gr	2.55 mm +/- 0.13 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	40 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	126.2 Ω/km
Operating Voltage (at sea level)	≤ 1.5 kVrms
Test voltage (50 Hz/1 min)	≤ 3 kVrms
Noise level	10 mV

Mechanical data	
Weight	approx. 13 g/m
Static bending radius	≥ 13 mm
Repeated bending radius	25 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	U2

Ordering information		
Item number	Item description	Available as assembly only
22510110	G_02232-09	No

Power Matrix			
Calculation: typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]			
a coefficient typical =	0.867	b coefficient typical =	0.1289
fmax =	1	P at 1 GHz =	38
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	0.287	0.087	120
0.20	0.414	0.126	85
0.30	0.514	0.157	69
0.40	0.600	0.183	60
0.60	0.749	0.228	49
0.80	0.879	0.268	42
1.00	0.996	0.304	38

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