DATA SHEET

RG58 alternative, 50 Ohm, 1 GHz, 85°C, ø5 mm, PVC jacket

G_03232

Properties

- Custom version of RG_58
- PVC jacket

Construction			
Component	**Material**	**Detail**	**Diameter**
Centre conductor	Copper	Strand-07, 95 %, RAL 9005 - bk	0.95 mm - 0.15 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper	Braid, 95%	3.6 mm
Jacket	PVC (Polyvinyl chloride)	RAL 9005 - bk	5 mm +/- 0.15 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	39 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	32.97 Ω/km
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 37 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	50 mm

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

RG58 alternative, 50 Ohm, 1 GHz, 85°C, ø5 mm, PVC jacket

G_03232

Suitable connectors	
Cable group	U7

Ordering information		
Item number	Item description	Available as assembly only
22510128	G_03232	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 =	**0.4027**	b coefficient typical =	**0.08**
fmax =	**1**	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	0.135	0.041	348
0.20	0.196	0.060	246
0.30	0.245	0.075	201
0.40	0.287	0.087	174
0.60	0.360	0.110	142
0.80	0.424	0.129	123
1.00	0.483	0.147	110

DOCUMENT PIM-P1074 / Date of publication: 11.02.2025 / uncontrolled copy