

RG196, 50 Ohm, 1 GHz, 205°C, ø1.83 mm, PFA jacket

RG_196_A/U

Properties

- Mil standard RG cable
- Excellent RF performance for precision applications
- Suitable for use in application up to 1 GHz
- Extended temperature range



Construction			
Component	Material	Detail	Diameter
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.83 mm
Outer conductor	Copper, Silver plated	Braid, 96%	1.33 mm
Jacket	PFA (Perfluoroalkoxy)	RAL 9010 - wh	1.83 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 1 GHz
Capacitance	97 pF/m
Velocity of signal propagation	69 %
Signal delay	4.84 ns/m
Screening effectiveness	42 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 0.5 kVrms
Test voltage (50 Hz/1 min)	≤ 1 kVrms

Mechanical data	
Weight	approx. 9.2 g/m
Static bending radius	≥ 10 mm
Repeated bending radius	18 mm
Dynamic bending radius	< 27 mm

Environmental data	
Operation temperature	-80 °C ... 205 °C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	IEC 60332-3

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Environmental data	
Fire characteristics	contains halogene

Suitable connectors	
Cable group	U1

Ordering information		
Item number	Item description	Available as assembly only
22510049	RG_196_A/U	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 =	1.4135	b coefficient typical =	0.2038
fmax =	1.0	P at 1 GHz =	108.0
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
0.20	0.673	0.205	241
0.40	0.975	0.297	171
0.60	1.217	0.371	139
0.80	1.427	0.435	121
1.00	1.617	0.493	108

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