DATA SHEET

RG188 alternative, 50 Ohm, 3 GHz, 200°C, ø2.5 mm, FEP jacket

RG_188_A/U-01

Properties

- Alternative to RG_188
- Excellent RF performance for precision applications
- Suitable for use in applications up to 3 GHz

Construction			
Component	**Material**	**Detail**	**Diameter**
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.54 mm
Dielectric	FEP (Fluorinated ethylene propylene)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 96%	2 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	2.5 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 3 GHz
Capacitance	97 pF/m
Velocity of signal propagation	69 %
Signal delay	4.83 ns/m
Screening effectiveness	41 dB at frequency 0.001 GHz ... 1GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	246.05 Ω/km
Operating Voltage (at sea level)	≤ 1.45 kVrms
Test voltage (50 Hz/1 min)	≤ 2.9 kVrms

Mechanical data	
Weight	approx. 17 g/m
Static bending radius	≥ 15 mm
Repeated bending radius	25 mm
Dynamic bending radius	< 37 mm

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Environmental data	
Operation temperature	-65 °C ... 200 °C
Installation temperature	-20 °C ... 60°C
Flame propagation standard	IEC 60332-3
Fire characteristics	contains halogene

Suitable connectors	
Cable group	U2

Ordering information

Item number	Item description	Available as assembly only
22510047	RG_188_A/U-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 =	**0.7501**	b coefficient typical =	**0.0884**
fmax =	**3.0**	P at 1 GHz =	**180.0**
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	0.353	0.108	402
0.40	0.510	0.155	285
0.60	0.634	0.193	232
0.80	0.742	0.226	201
1.00	0.839	0.256	180
1.20	0.928	0.283	164
1.40	1.011	0.308	152
1.60	1.090	0.332	142
1.80	1.165	0.355	134
2.00	1.238	0.377	127
3.00	1.564	0.477	104

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