DATA SHEET

RG393, 50 Ohm, 6 GHz, 200°C, ø9.9 mm, FEP jacket

RG_393_/U

Properties

- According to RG cable standard
- Excellent RF performance for precision applications
- Suitable for use in applications up to 6 GHz
- Extended temperature range

Construction			
Component	**Material**	**Detail**	**Diameter**
Centre conductor	Copper, Silver plated	Strand-07	2.46 mm
Dielectric	PFA (Perfluoroalkoxy)		7.25 mm
Outer conductor	Copper, Silver plated	Braid, 92%	8 mm
Outer conductor	Copper, Silver plated	Braid, 94%	8.75 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	9.9 mm +/- 0.25 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 6 GHz
Capacitance	95.9 pF/m
Velocity of signal propagation	70 %
Signal delay	4.79 ns/m
Screening effectiveness	81 dB at frequency 0.001 GHz ... 6GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 5.5 kVrms
Test voltage (50 Hz/1 min)	≤ 12.5 kVrms

Mechanical data	
Weight	approx. 229 g/m
Static bending radius	≥ 60 mm
Repeated bending radius	100 mm
Dynamic bending radius	< 150 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
	IEC 60332-1-2
Fire characteristics	contains halogene

Material compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
22511430	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Free of SVHC >0,1%	

Additional Information
MIL reference: M17/127-RG393

Suitable connectors	
Cable group	U33

Ordering information		
Item number	Item description	Available as assembly only
22511430	RG_393_/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 =	**0.1749**	b coefficient typical =	**0.129**
fmax =	**6**	P at 1 GHz =	**1461**
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	0.104	0.032	3267
0.40	0.162	0.049	2310
0.60	0.213	0.065	1886
0.80	0.260	0.079	1633
1.00	0.304	0.093	1461
1.20	0.346	0.106	1334
1.40	0.388	0.118	1235
1.60	0.428	0.130	1155
1.80	0.467	0.142	1089
2.00	0.505	0.154	1033
4.00	0.866	0.264	730
6.00	1.202	0.366	596

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