

RG400, 50 Ohm, 6 GHz, 200°C, ø4.95 mm, FEP jacket

RG_400_/U

Properties

- Mil standard RG cable
- 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-19	1mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.6mm
Outer conductor	Copper, Silver plated	Braid, 94%	4.2mm
Jacket	FEP (Fluorinated ethylene propylene)		4.95 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 6 GHz
Capacitance	94 pF
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Screening effectiveness	81 dB at frequency 0.001 GHz ... 6GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	28.31 Ω/km
Operating Voltage (at sea level)	≤ 1.7 kV
Test voltage (50 Hz/1 min)	≤ 3.4 kV

Mechanical data	
Weight	approx. 64 g/m
Static bending radius	≥ 30 mm
Repeated bending radius	50 mm
Dynamic bending radius	< 75 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

Additional Information

MIL reference: M17/128-RG400

Suitable connectors

Cable group U11

Ordering information

Item number	Item description	Available as assembly only
22510080	RG_400_/U	No

Power MatrixCalculation: typical Attenuation [formula: (a*f^{0.5} + b*f)] and maximum Power CW [formula: (p/f^{0.5})]

a coefficient typical =	0.3894	b coefficient typical =	0.0925
fmax =	6.0	P at 1 GHz =	365.0

Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation Max. (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.193	0.059	816
0.40	0.283	0.086	577
0.60	0.357	0.109	471
0.80	0.422	0.129	408
1.00	0.482	0.147	365
1.20	0.538	0.164	333
1.40	0.590	0.180	308
1.60	0.641	0.195	289
1.80	0.689	0.210	272
2.00	0.736	0.224	258
4.00	1.149	0.350	182
6.00	1.509	0.460	149

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