

RG303, 50 Ohm, 1 GHz, 200°C, ø4.3 mm, FEP jacket

RG_303_/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	Wire	0.95 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.6 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	4.3 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 1 GHz
Capacitance	94 pF/m
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Screening effectiveness	40 dB at frequency 0.001 GHz ... 3GHz
Insulation resistance	100000000 MΩ*m
Inner conductor resistance	63.2 Ω/km
Operating Voltage (at sea level)	≤ 2.5 kVrms
Test voltage (50 Hz/1 min)	≤ 5 kVrms

Mechanical data	
Weight	approx. 44.8 g/m
Static bending radius	≥ 25 mm
Repeated bending radius	43 mm

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

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Environmental data	
Fire characteristics	contains halogene

Additional Information
MIL reference: M17/111-RG303

Suitable connectors	
Cable group	U7

Ordering information		
Item number	Item description	Available as assembly only
22510078	RG_303_/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 =	0.3956	b coefficient typical =	0.0645
fmax =	1	P at 1 GHz =	338
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	0.190	0.058	756
0.40	0.276	0.084	534
0.60	0.345	0.105	436
0.80	0.405	0.124	378
1.00	0.460	0.140	338

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