



Non magnetic Flexible Coaxial Cable  
50  $\Omega$  - PTFE - Single Shielding

**RG-178-C**



**Material And Diameter**

Connector parts	Material	Diameter
Inner Conductor	Copper, Silver plated	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)	0.84 mm
Outer Shield	Copper, Silver plated	1.35 mm
Jacket	FEP (Fluorinated ethylene propylene)	1.80 mm

**Electrical Data**

Impedance	50 $\Omega \pm 2$
Frequency	DC to 6 GHz
Capacitance	95 pF/m
Velocity of signal propagation	70 %
Signal delay	4.7 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M $\Omega$ /m
Screening effectiveness	$\geq 40$ dB (up to 1 GHz)
Operating voltage	$\leq 0.5$ kVrms (@ sea level)

**Mechanical Data**

Weight	8.0 g/m
Min. bending radius	10 mm (Static) 27 mm (Dynamic)

**Environmental Data**

Temperature range	-65°C to +165°C
Installation temperature	-20°C to +60°C
RoHS (2011/65/EU)	compliant

**Typical Attenuation**

Frequency (GHz)	Typical Attenuation (dB/m) @ 25°C sea level	Typical Attenuation (dB/ft) @ 25°C sea level	Max. CW power (Watt) @ 40°C sea level
0.1	0.58	0.18	225
0.4	1.05	0.32	115
0.9	1.58	0.48	72
1	1.68	0.51	68
1.8	2.24	0.68	47
2.4	2.59	0.79	40
3	2.91	0.89	34
5	3.76	1.15	26
6	4.13	1.26	23

**Additional Information**

MIL reference	MIL-C-17/93
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