

RG178 Low Cost

Features:
* Low Cost

Applications:
* Telecom
* Interconnect between equipment

Electrical

Frequency:	DC~6GHz
Impedance:	50±2Ω
Velocity of Propagation:	70%
VSWR:	1.30 max.@DC~6GHz
Voltage Withstand:	1000V DC
Capacitance:	96pF/m

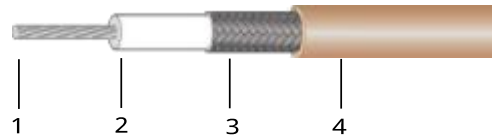
Mechanical

Bend Radius(installation):	10mm min.
Bend Radius(repeated):	40mm min.

Environmental

Temperature:	-55~+200°C
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Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.3	Silverplated copper Wire
2	Dielectric	0.9	PTFE
3	Outer Conductor	1.3	Silverplated copper Wire
4	Jacket	1.8	FEP

Attenuation

Frequency (GHz)	0.1	0.4	1	2	3	4	5	6
Attenuation(dB/100m)	52	120	170	242	308	363	415	480

Calculate Cable Attenuation: $\text{Attenuation (dB/100m)} = 2.577759 * \sqrt{F \text{ (MHz)}} + 0.004024 * F \text{ (MHz)}$

Calculate Connector Attenuation: $\text{Attenuation (dB)} = 0.03 * \sqrt{F \text{ (GHz)}}$

How To Order

RG178-X-Y-Z

X: Frequency in GHz
Y: Connector type
Z: Length in meters

Examples:

To order a RG178 cable assembly, DC-3GHz, SMA male to SMA female, 0.8 meter, specify RG178-3-SSF-0.8.

Connector naming rules:

S - SMA (6GHz, VSWR 1.4)
X - MMCX (6GHz, VSWR 1.4)
M - MCX (6GHz, VSWR 1.4)
B - BNC (4GHz, VSWR 1.4)
D - SMB (4GHz, VSWR 1.4)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)