

# 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

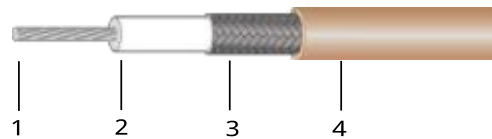
### Mechanical

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

Calculate Connector Attenuation: 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)