

## RG178D Low Cost

Features:  
\* Low Cost

Applications:  
\* Telecom  
\* Interconnect between equipment

### Electrical

Frequency:	DC~6GHz
Impedance:	50±3Ω
Velocity of Propagation:	70%
Voltage:	750VMS max.
Capacitance:	100±5pF/m

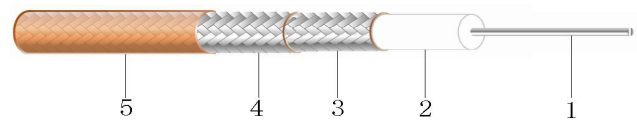
### Mechanical

Bend Radius:	10mm
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### Environmental

Temperature:	-40~+200°C
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### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.3±0.01	Silver plated copper wire
2	Dielectric	0.86±0.05	PTFE
3	Outer Conductor	1.25±0.01	Silver plated copper wire
4	Outer Conductor	1.65±0.01	Silver plated copper wire
5	Jacket	2.4±0.1	FEP

### Attenuation

Frequency (GHz)	0.1	0.2	0.4	1	1.5	2	3	5	6
Attenuation(dB/100m)	52.6	85.1	118.8	190.7	225.2	270.8	340.4	385.7	423.1

Calculate Cable Attenuation: Attenuation (dB/100m) =  $4.903674 * \sqrt{F} \text{ (MHz)} + 0.0356326 * F \text{ (MHz)}$

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

### How To Order

#### RG178D-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a RG178D cable assembly, DC~6GHz, SMA male to SMA female, 5 meter, specify RG178D-6-SSF-5.

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)