

RG174 Low Cost

Features:
* Low Cost

Applications:
* Telecom
* Interconnect between equipment

Electrical

Frequency:	DC~3GHz
Impedance:	50Ω
Velocity of Propagation:	66%
Voltage Withstand:	900V DC
Capacitance:	101pF/m

Mechanical

Bend Radius(installation):	14mm
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Environmental

Temperature:	-20~+75°C
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Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.45	Bare copper wire
2	Dielectric	1.45	Solid PE
3	Outer Conductor	2	Bare copper wire
4	Jacket	2.8	PVC

Attenuation

Frequency (GHz)	0.2	1.8	2.5	3
Attenuation*1 (dB/100m)	44	147	181	199

[1] VSWR:1.0; Ambient: +20°C (68°F)

Calculate Cable Attenuation: $\text{Attenuation (dB/100m)} = 2.9578496 * \sqrt{F \text{ (MHz)}} + 0.011905 * F \text{ (MHz)}$

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

How To Order

RG174-X-Y-Z

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

Examples:

To order a RG174 cable assembly, DC-3GHz, SMA male to SMA female, 500 meter, specify RG174-3-SSF-500.

Connector naming rules:

S - SMA (3GHz, VSWR 1.3)
X - MMCX (3GHz, VSWR 1.3)
M - MCX (3GHz, VSWR 1.3)
B - BNC (3GHz, VSWR 1.4)
D - SMB (3GHz, VSWR 1.4)

Female Connector - Add 'F' after connector name

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