

### RG179

Low Cost

Features:  
\* Low Cost

Applications:  
\* Telecom  
\* Interconnect between equipment

#### Electrical

|                          |                   |
|--------------------------|-------------------|
| Frequency:               | DC~3GHz           |
| Impedance:               | 75±2Ω             |
| Velocity of Propagation: | 70%               |
| VSWR:                    | 1.20 max.@DC~1GHz |
| Voltage Withstand:       | 1200V DC          |
| Capacitance:             | 64pF/m            |

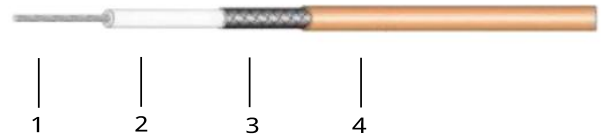
#### Mechanical

|                            |           |
|----------------------------|-----------|
| Bend Radius(installation): | 12mm min. |
| Bend Radius(repeated):     | 50mm min. |

#### Environmental

|              |            |
|--------------|------------|
| Temperature: | -55~+200°C |
|--------------|------------|

#### Construction



| No. | Name            | Size (mm) | Material                  |
|-----|-----------------|-----------|---------------------------|
| 1   | Inner Conductor | 0.306     | Silver plated copper wire |
| 2   | Dielectric      | 1.60      | FEP                       |
| 3   | Outer Conductor | 2.05      | Silver plated copper wire |
| 4   | Jacket          | 2.54      | FEP                       |

#### Attenuation

|                      |      |      |      |
|----------------------|------|------|------|
| Frequency (GHz)      | 0.1  | 0.4  | 1    |
| Attenuation(dB/100m) | 26.6 | 54.1 | 87.5 |

Calculate Cable Attenuation: Attenuation (dB/100m) =  $2.64685263 * \sqrt{F} \text{ (MHz)} + 0.0028125 * F \text{ (MHz)}$

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

#### How To Order

##### RG179-X-Y-Z

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

Examples:

To order a RG179 cable assembly, DC-3GHz, SMA male to SMA female, 0.8 meter, specify RG179-3-SSF-0.8.

Connector naming rules:

S - SMA (6GHz, VSWR 1.4)

F - F (2.2GHz, VSWR 1.4)

Female Connector - Add 'F' after connector name

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