

# RG304

## Low Cost

Features:  
\* Low Cost

Applications:  
\* Telecom  
\* Interconnect between equipment

### Electrical

|                          |                    |
|--------------------------|--------------------|
| Frequency:               | DC~6GHz            |
| Impedance:               | 50±2Ω              |
| Velocity of Propagation: | 70%                |
| VSWR:                    | 1.20 max. @DC~3GHz |
| Voltage Withstand:       | 3200V DC           |
| Capacitance:             | 96pF/m             |

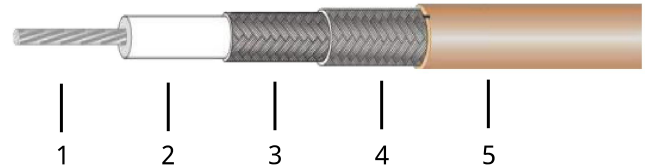
### Mechanical

|                            |           |
|----------------------------|-----------|
| Bend Radius(installation): | 40mm min. |
| Bend Radius(repeated):     | 71mm min. |

### Environmental

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

### Construction



| No. | Name             | Size (mm) | Material                 |
|-----|------------------|-----------|--------------------------|
| 1   | Inner Conductor  | 1.48      | Silverplated copper Wire |
| 2   | Dielectric       | 4.6       | PTFE                     |
| 3   | Outer Conductor1 | 5.0       | Silverplated copper Wire |
|     | Outer Conductor2 | 5.6       | Silverplated copper Wire |
| 4   | Jacket           | 7.1       | FEP                      |

### Attenuation

| Frequency (GHz)                     | 0.03 | 0.2  | 3    | 5    | 6    |
|-------------------------------------|------|------|------|------|------|
| Attenuation <sup>*1</sup> (dB/100m) | 6.27 | 16.5 | 73.7 | 78.9 | 86.9 |

[1] VSWR:1.0; Ambient: +25°C (77°F)

Calculate Cable Attenuation: Attenuation (dB/100m) =  $5.116766 * \sqrt{F} \text{ (MHz)} + 0.008134 * F \text{ (MHz)}$

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

### How To Order

#### RG304-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a RG304 cable assembly, DC-6GHz, SMA male to SMA female, 0.8 meter, specify RG304-6-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)