RG214/U Type Coaxial Cable
PVC Sheath

C1049

Application

RF and Broadcast transmission as well as in wireless communication applications.

Cross Section Drawing

Design

<table>
<thead>
<tr>
<th>Unit</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor</td>
<td>Flexible Bare Copper Wire</td>
</tr>
<tr>
<td>Insulation</td>
<td>Solid Polyethylene</td>
</tr>
<tr>
<td>Braid 1</td>
<td>Bare Copper Wire</td>
</tr>
<tr>
<td>Braid 2</td>
<td>Bare Copper Wire</td>
</tr>
<tr>
<td>Sheath Material</td>
<td>Polyvinyl Chloride (PVC) Standard Color: Black</td>
</tr>
<tr>
<td>Standard Put Up Length</td>
<td>305 - 500 or 1000 metres</td>
</tr>
</tbody>
</table>

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.
### Physical Characteristics

<table>
<thead>
<tr>
<th>Part Number</th>
<th>C1049</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor Configuration (AWG)</td>
<td>13(7×21)</td>
</tr>
<tr>
<td>Nom. Diameter Conductor (mm)</td>
<td>2.26</td>
</tr>
<tr>
<td>Nom. Diameter Dielectric</td>
<td>7.24</td>
</tr>
<tr>
<td>Coverage Braid 1 (%)</td>
<td>95</td>
</tr>
<tr>
<td>Coverage Braid 2 (%)</td>
<td>95</td>
</tr>
<tr>
<td>Nom. Overall Diameter (mm)</td>
<td>10.8</td>
</tr>
<tr>
<td>Operating Temperature (°C)</td>
<td>-40°C to +80°C</td>
</tr>
<tr>
<td>Max. Recommended Pulling Tension (N)</td>
<td>820</td>
</tr>
<tr>
<td>Min. Bend Radius (install) (mm)</td>
<td>110</td>
</tr>
<tr>
<td>Nominal Cable Weight (kg/km)</td>
<td>191</td>
</tr>
</tbody>
</table>

### Electrical Characteristics at 20°C

<table>
<thead>
<tr>
<th>Max. DC Resistance (Ω/km)</th>
<th>Max. DC Shield Resistance (Ω/km)</th>
<th>Impedance (ohms)</th>
<th>Nom. Inductance (μH/m)</th>
<th>Nom. Capacitance Conductor to Shield (pF/m)</th>
<th>Nom. Velocity Of Propagation (%)</th>
<th>Nom. Time Delay (ns/m)</th>
<th>Min. Return Loss 5 – 1000 MHz / 1000 – 2500 MHz (dB)</th>
<th>Max. Operating Voltage (V RMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>2.5</td>
<td>50 ± 3</td>
<td>0.25</td>
<td>101</td>
<td>66</td>
<td>5.05</td>
<td>20/18</td>
<td>300</td>
</tr>
</tbody>
</table>

### Nom. Attenuation Table

<table>
<thead>
<tr>
<th>Frequency [MHz]</th>
<th>Attenuation (dB/100m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.41</td>
</tr>
<tr>
<td>10</td>
<td>1.81</td>
</tr>
<tr>
<td>50</td>
<td>4.27</td>
</tr>
<tr>
<td>100</td>
<td>6.23</td>
</tr>
<tr>
<td>200</td>
<td>8.86</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency [MHz]</th>
<th>Attenuation (dB/100m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>13.45</td>
</tr>
<tr>
<td>700</td>
<td>21.32</td>
</tr>
<tr>
<td>900</td>
<td>24.92</td>
</tr>
<tr>
<td>1000</td>
<td>26.23</td>
</tr>
<tr>
<td>4000</td>
<td>65.58</td>
</tr>
</tbody>
</table>

### Reference Standards

- IEC 60228
- (BS) EN 50290-2
- MIL-C-17, M17/075
- IEC 61196
- RoHS directives