RG 214 Coaxial Cable

RG 214 coax cable is a favored type of coaxial cable used for high-frequency signal transmissions. This coaxial cable is most commonly found in telecommunications, data transmission, radio frequency communication, broadcast, and computer applications. It is used to connect wireless and data communication systems that require high signal sequences and low attenuation, as well as in test leads and quality installations requiring low PIM and cross talk. RG 214 coax cable is also approved for use within radio frequency and microwave transmission in LAN networks and instrumentation or control applications. The RG 214 has a military equivalent part number of M17/75-RG214.

RG 214 Coaxial Cable Construction

- **Inner Cond:** Silver Coated Copper
- **Dielectric:** Solid Polyethylene
- **Outer Cond:** Silver-Plated Copper Braided Shield (x2)
- **Jacket:** PVC (Non-Contaminating) Type IIA per MIL-C-17

RG 214 Coaxial Cable Additional Specifications

- **Weight:** 138 lb/ft
- **Bend Radius:** 1.6"
- **Operating Temperature:** -20°C to +80°C

RG 214 Coaxial Cable Electrical Specifications

- **Capacitance:** 50 +/- 2 ohms
- **Impedance:** 32.2 pF/ft
- **Maximum Conductor Resistance:** 0.17
- **Velocity of Propagation:** 66%

RG 214 Loss Attenuation Specifications and Power Handling by Frequency

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Attenuation (db/100ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1.7</td>
</tr>
<tr>
<td>400</td>
<td>5.5</td>
</tr>
<tr>
<td>3000</td>
<td>28</td>
</tr>
<tr>
<td>11000</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SRL (db/100ft)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 GHz</td>
<td>20</td>
</tr>
<tr>
<td>3.0 GHz</td>
<td>19</td>
</tr>
<tr>
<td>5.0 GHz</td>
<td>18</td>
</tr>
<tr>
<td>11.0 GHz</td>
<td>17</td>
</tr>
</tbody>
</table>

The information contained in this document is accurate to the best of our knowledge and representative of the part described here. Unless otherwise stated, all specifications are nominal.
RG 214 Coaxial Cable Mechanical Specifications

Inner Conductor:
- Material: Silver Coated Copper
- Diameter, in: 0.089

Dielectric:
- Material: Solid Polyethylene
- Color: Natural
- Diameter, in: 0.285

Outer Conductor:
- Count: 2
- Material 1: Silver Plated Copper Braid
  - Coverage: 96%
  - Diameter, in: 0.313
- Material 2: Silver Plated Copper Braid
  - Coverage: 98%
  - Diameter, in: 0.341

Jacket:
- Material: PVC (Non-Contaminating) Type IIA per MIL-C-17
- Color: Black
- Wall Thickness, in: 0.042
- Diameter, in: 0.425
RG 214 Coaxial Cable CAD Drawing