**CERNEXWAVE**

**Electrical Properties (Cable Only)**

- Impedance (ohms): 50
- Velocity of Propagation (%): 76%
- Min. Shielding Effectiveness (dB): 90

**Phase vs. Flexure** Figure 3

- Phase vs. Temperature Figure 4
- Min. Breakdown Voltage (KV): 4
- Capacitance (pF/ft): 28
- Inductance (nH/ft): 65
- Max Operating Temp (°C): 65.0
- Max Structural VSWR: 1.25:1

**Physical Properties (Cable Only)**

- Maximum Temperature (deg C): -65 / +105
- Recommended Temperature (deg C): -65 / +165
- Outdoor Jacket Option (in): 0.110
- High Temp. Jacket Option (in): 0.102
- Round Braid O.D. (in): 0.084
- Helical Foil O.D. (in): 0.065
- Flat Braid O.D. (in): 0.060
- Dielectric O.D. (in): 0.055
- Stranded Center Conductor (in): 0.019
- Inside Min. Bend Radius (in): 0.5
- Flexure Life (3x min bend radius): >500,000
  (for higher flex life consult factory)
- Connector Retention (lbs): TBD
- Axial Torque Resistance (lb-in): TBD
- Weight (lbs/ft): 0.013
- Crush Resistance (lbs/in): TBD
- Kink Resistance (lbs): TBD

**Attenuation (dB/100 ft) @ 25 deg C**

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>dB/100 ft</th>
<th>K Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>29.68</td>
<td>0.55</td>
</tr>
<tr>
<td>1.0</td>
<td>29.48</td>
<td>0.39</td>
</tr>
<tr>
<td>3.0</td>
<td>52.08</td>
<td>0.22</td>
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<tr>
<td>6.0</td>
<td>75.05</td>
<td>0.16</td>
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<tr>
<td>12.0</td>
<td>108.95</td>
<td>0.11</td>
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<tr>
<td>18.0</td>
<td>136.08</td>
<td>0.09</td>
</tr>
<tr>
<td>26.0</td>
<td>167.04</td>
<td>0.07</td>
</tr>
<tr>
<td>32.0</td>
<td>187.84</td>
<td>0.07</td>
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<tr>
<td>40.0</td>
<td>213.39</td>
<td>0.06</td>
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<tr>
<td>50.0</td>
<td>242.80</td>
<td>0.05</td>
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<tr>
<td>70.0</td>
<td>295.95</td>
<td>0.04</td>
</tr>
<tr>
<td>K1</td>
<td>28.68</td>
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</tr>
<tr>
<td>K2</td>
<td>0.80</td>
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</tr>
</tbody>
</table>

(400 Series cables are constructed in accordance with MIL-DTL-17)

**Center Conductor:** Stranded, Silver Plated Copper per ASTM B208

**Dielectric:** Type F per ASTM D4994 or D495, Semisolid PTFE (proprietary)

**Primary Shield:** Silver Plated Copper per ASTM B208

**Secondary Shield:** Conductive Tape (proprietary)

**Thyroid Shield:** Silver Plated Copper per ASTM B230

**High Temp. Jacket:** Type X per ASTM D3159, ETFE

**Outdoor Jacket:** Type XII Polyurethane (optional)

[Flame Resistance & Smoke = UL94 V-0]

[Zero Halogen, Flame Resistance & Smoke = UL94 V-0]