UHF - Coaxial Dipole

The Laser Clear* transparent antenna is an innovation brought about by the need for discreet and high performance antennas used on wireless communication systems.

Since its original conception as a UHF (460MHz) antenna for unmarked police vehicles, this planar and transparent antenna, designed to be mounted inside the windscreen, has been engineered to give exceptional broad-band performance. The design covers the 400 - 500MHz frequency band.

Its patented construction uses a conductive element on a clear and flexible substrate. The proprietary connector interfaces the antenna with RG174 coaxial cable for flexible installation ease.

“* Naming rights for OEM and other situations available
Features of this antenna are covered by
EU Patent No.: 0 903 805 New Zealand Patent No.: 519 721
Patent Pend.: Australia, China, Japan

“If you haven’t seen our Laser Clear products, then we’ve done a good job”
**Electrical**

- **Radiator:** Half-wave coaxial dipole with broadband active element.
- **Bandwidth:** >50MHz
- **Gain:** Unity (2.2dBi)
- **VSWR:** <1.2:1 @ Band Center
- **Polarisation:** Linear (vertical or horizontal)
- **Max Power:** 25 watts

**Mechanical**

- **Radiating Element:** Silver ink track.
- **Substrate:** Clear Polyester/Mylar film (180um). Not affected by UV.
- **Adhesive/Dielectric:** 3M 467 Epoxy. This adhesive gets stronger over time and is not affected by UV.

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**UHF - Coaxial Dipole Specifications**

<table>
<thead>
<tr>
<th>1: Mkr (MHz)</th>
<th>2: Mkr (MHz) dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 420.000</td>
<td>1.357</td>
</tr>
<tr>
<td>2: 440.000</td>
<td>1.186</td>
</tr>
<tr>
<td>3: 460.000</td>
<td>1.059</td>
</tr>
<tr>
<td>4: 480.000</td>
<td>1.088</td>
</tr>
<tr>
<td>5: 500.000</td>
<td>1.199</td>
</tr>
<tr>
<td>6: 520.000</td>
<td>1.388</td>
</tr>
<tr>
<td>7: 540.000</td>
<td>1.431</td>
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</tbody>
</table>

**Typical Dimensions**

(actual dimension varies for different design center frequencies)

**Reverse Side**

(showing peel-off adhesive backing)