## Rectangular Waveguides

<table>
<thead>
<tr>
<th>Mi-Wave Band</th>
<th>Waveguide Designator (WR)</th>
<th>Waveguide Inner Dimensions in Inches</th>
<th>Frequency (GHz)</th>
<th>Wave-length (mm)</th>
<th>Frequency (GHz)</th>
<th>Wave-length (mm)</th>
<th>Theoretical Power CW Breakdown Lowest to Highest Frequency (KW)</th>
<th>Theoretical Attenuation Lowest to Highest Frequency (dB/ft)</th>
<th>Flange Type</th>
<th>Historic Designation</th>
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</thead>
<tbody>
<tr>
<td>Ku</td>
<td>WR-62</td>
<td>0.622 x 0.311</td>
<td>12.4–18.0</td>
<td>24.2–16.6</td>
<td>9.486</td>
<td>31.60</td>
<td>400–600 .064–0.030</td>
<td>0.17–0.11</td>
<td>Cover1</td>
<td>UG-419/U Flange</td>
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<td>K</td>
<td>WR-42</td>
<td>0.420 x 0.170</td>
<td>18.0–26.5</td>
<td>16.6–11.3</td>
<td>14.047</td>
<td>21.34</td>
<td>160–240 .17–0.11</td>
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<td>A</td>
<td>WR-28</td>
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<td>26.5–40.0</td>
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<td>21.081</td>
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<td>B</td>
<td>WR-22</td>
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<td>9.1–6.0</td>
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<td>U</td>
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<td>40.0–60.0</td>
<td>7.5–5.0</td>
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<td>WR-15</td>
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<td>50.0–75.0</td>
<td>6.0–4.0</td>
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<td>29–42 .78–0.53</td>
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<td>E</td>
<td>WR-12</td>
<td>0.122 x 0.061</td>
<td>60.0–90.0</td>
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<td>20–29 .78–0.53</td>
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<td>W</td>
<td>WR-10</td>
<td>0.100 x 0.050</td>
<td>75.0–110</td>
<td>4.0–2.7</td>
<td>59.010</td>
<td>5.08</td>
<td>14–20 1.02–0.71</td>
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<td>0.080 x 0.040</td>
<td>90.0–140.0</td>
<td>3.3–2.1</td>
<td>73.764</td>
<td>4.06</td>
<td>8.5–13.5 1.52–0.98</td>
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<td>D</td>
<td>WR-7</td>
<td>0.065 x 0.0325</td>
<td>110.0–170.0</td>
<td>2.7–1.8</td>
<td>90.786</td>
<td>3.30</td>
<td>5.8–9.0 2.12–1.35</td>
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<td>G</td>
<td>WR-5</td>
<td>0.051 x 0.0255</td>
<td>140.0–220.0</td>
<td>2.1–1.4</td>
<td>115.71</td>
<td>2.59</td>
<td>3.7–6.1 3.05–1.93</td>
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<td>H</td>
<td>WR-4</td>
<td>0.043 x 0.021</td>
<td>170.0 – 260.0</td>
<td>1.7–1.2</td>
<td>137.3</td>
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<td>J</td>
<td>WR-3</td>
<td>0.086 x 0.034</td>
<td>220.0 – 330.0</td>
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<td>WR-2.2</td>
<td>WR-2.2</td>
<td>0.022 x 0.011</td>
<td>330.0 – 500.0</td>
<td>0.9–0.6</td>
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</tbody>
</table>

1. Standard flange unless otherwise specified.
2. Modified (-M) means waveguide opening has been reduced appropriately. Screw and pin pattern are unchanged.