Variable Attenuators (Waveguide & Coaxial)

FEATURES:

- 0.5-180GHz
- Characteristic Impedance: 50Ω
- Low Insertion Loss
- Good Impedance matching
- Economically Priced

APPLICATIONS:

- Test Equipment
- Subsystems
- Prototypes

DESCRIPTION:

Cernex CSA Series variable (level) setting attenuators can have variable IL that range from 0 to 25 dB with full waveguide operational bandwidth. The variable (level) setting attenuators are equipped with a micrometer, which enables rapid re-setting. With calibrated charts, the variable (level) setting attenuators can be used as direct reading attenuator for bench top test set ups. This variable setting attenuators are typically used in test set ups and prototype assemblies where certain attenuation are required.

SPECIFICATIONS:

COAXIAL:

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Frequency Range (GHz)</th>
<th>Attenuation Range (dB)</th>
<th>VSWR (Max)</th>
<th>Power (W)</th>
<th>Size (mm)</th>
<th>Connector Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAU5042002TY</td>
<td>0.5-4.0</td>
<td></td>
<td>1.50</td>
<td>2</td>
<td>144.0X72.4X 19.7</td>
<td>N</td>
</tr>
<tr>
<td>CSA04182002TY</td>
<td>4.0-18.0</td>
<td>1.0-20</td>
<td>1.50</td>
<td>2</td>
<td>109.2X63.5X 17.53</td>
<td>SMA</td>
</tr>
</tbody>
</table>

* ATTENUATION: 7dB@0.5GHz, 20dB@1-1.5GHz, >20dB@2-4GHz
OTHER FREQUENCY BANDS AND ATTENUATION VALUES ARE ALSO AVAILABLE.

WAVEGUIDE:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>C</th>
<th>X</th>
<th>Ku</th>
<th>Kc</th>
<th>K</th>
<th>Kb</th>
<th>Ka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>4.90 to 7.05</td>
<td>8.20 to 12.40</td>
<td>12.4 to 18</td>
<td>15.0 to 22.0</td>
<td>18 to 26.5</td>
<td>22.0 to 33.0</td>
<td>26.5 to 40.0</td>
</tr>
<tr>
<td>Waveguide Size</td>
<td>WR-159</td>
<td>WR-90</td>
<td>WR-62</td>
<td>WR-51</td>
<td>WR-42</td>
<td>WR-34</td>
<td>WR-28</td>
</tr>
<tr>
<td>Power Handling</td>
<td>2W</td>
<td>2W</td>
<td>2W</td>
<td>2W</td>
<td>1W</td>
<td>1W</td>
<td>1W</td>
</tr>
<tr>
<td>Level Setting Value (dB, Typical)</td>
<td>0 to 30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSWR (Typical)</td>
<td>1.15:1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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CONTACT FACTORY FOR OTHER ATTENUATION VALUES AND SPECIFICATIONS.
Variable Attenuators (Waveguide & Coaxial)

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<tr>
<th>Waveguide Band</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
<th>F</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>33.0 to 50.0</td>
<td>40.0 to 60.0</td>
<td>50.0 to 75.0</td>
<td>60.0 to 90.0</td>
<td>75.0 to 110.0</td>
<td>90.0 to 140.0</td>
<td>110.0 to 170.0</td>
</tr>
<tr>
<td>Waveguide Size</td>
<td>WR-22</td>
<td>WR-19</td>
<td>WR-15</td>
<td>WR-12</td>
<td>WR-10</td>
<td>WR-8</td>
<td>WR-6</td>
</tr>
<tr>
<td>Power Handling</td>
<td>1W</td>
<td>1W</td>
<td>0.75W</td>
<td>0.75W</td>
<td>0.75W</td>
<td>0.5W</td>
<td>0.5W</td>
</tr>
<tr>
<td>Level Setting Value (dB, Typical)</td>
<td>0 to 30</td>
<td></td>
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CONTACT FACTORY FOR OTHER ATTENUATION VALUES AND SPECIFICATIONS.

HOW TO ORDER:

**WAVEGUIDE:**
Specify Model Number

```
CSA – WG LF HF AT (PP) - XX
```

To be specified by factory

Waveguide Size

Higher Power as Option

Attenuation Value in dB

High End Frequency

**COAXIAL:**
Specify Model Number

```
CSA – LF HF AT WW - XX
```

To be specified by factory

Low End Frequency

Power

Attenuation Value in dB

High End Frequency

**Example:** To order a full band WR-15 variable attenuator with 20 dB attenuation level, specify CSA-15507520.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE