Product Description:

This 8 inch 8 ohm member of the NE family has leading-edge transducer technology packaged in a cutting edge, stylistic design. The subwoofers in this family feature an innovative cast aluminium basket design which minimizes acoustic reflections inside the driver, through large basket windows and sculpted basket spokes. The basket also is designed to act as a highly coupled heat sink to the NdFeB motor, so as to improve power handling capacity. An additional heat sink is available to provide extra thermal protection if needed. The cone and dust cap are constructed of natural wood fiber material with proprietary coating formulas & processes, so as to yield high clarity products. The cone designs also utilize pentacone technology for improved frequency response. The voice coil bobbin is titanium, for improved performance. The FEA-designed motor features copper caps to minimize inductance and extend performance to high frequencies. Rounding out the design is a 4-way terminal block connector, for ease of electrical connection.

Specifications:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Resistance R_{dc} [Ω]</td>
<td>6.3 ± 0.3</td>
</tr>
<tr>
<td>Minimum Impedance Z_{min} [Ω]</td>
<td>7.8 ± 0.3</td>
</tr>
<tr>
<td>Voice Coil Inductance L [mH]</td>
<td>0.21</td>
</tr>
<tr>
<td>Resonant Frequency f_{r} [Hz]</td>
<td>32 ± 1.5</td>
</tr>
<tr>
<td>Mechanical Q Factor Q_{M}</td>
<td>8.84</td>
</tr>
<tr>
<td>Electrical Q Factor Q_{E}</td>
<td>0.34</td>
</tr>
<tr>
<td>Total Q Factor Q_{T}</td>
<td>0.33</td>
</tr>
<tr>
<td>Energy Bandwidth Product EBP</td>
<td>(1/Q_{M}) f_{r} 94</td>
</tr>
<tr>
<td>Moving Mass M_{m} [g]</td>
<td>35.9</td>
</tr>
<tr>
<td>Suspension Compliance C_{s} [um/N]</td>
<td>693</td>
</tr>
<tr>
<td>Effective Cone Diameter D [cm]</td>
<td>17.00</td>
</tr>
<tr>
<td>Effective Piston Area S_{p} [cm²]</td>
<td>227.0</td>
</tr>
<tr>
<td>Equivalent Volume V_{e} [L]</td>
<td>50.164</td>
</tr>
<tr>
<td>Motor Force Factor B [Tm]</td>
<td>11.92</td>
</tr>
<tr>
<td>Motor Efficiency Factor β</td>
<td>21.02</td>
</tr>
<tr>
<td>Half Space Sensitivity @ 2.83V  dB</td>
<td>88.6 ±1.0</td>
</tr>
<tr>
<td>Sensitivity @ 1W/1m 1W/1m dB</td>
<td>87.5 ±1.0</td>
</tr>
<tr>
<td>Voice Coil Inner Diameter V_{C} [mm]</td>
<td>51.32</td>
</tr>
<tr>
<td>Gap Height Ga [mm]</td>
<td>8.00</td>
</tr>
<tr>
<td>Maximum Linear Extension X_{max} [mm]</td>
<td>7.70</td>
</tr>
<tr>
<td>Transducer Mass Kp [Kg]</td>
<td>1.84</td>
</tr>
<tr>
<td>Frequency and Impedance Response:</td>
<td></td>
</tr>
</tbody>
</table>

Mechanical 2D Drawing:

![Mechanical 2D Drawing](image-url)