

Aluminum Shorting
Ring

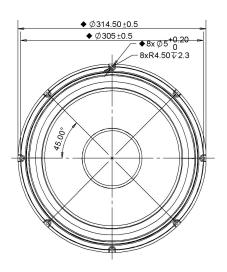
Coated Paper Cone

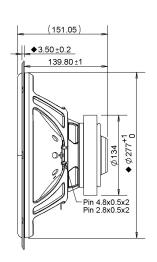
Ferrite Magnet

Pressed Steel Basket

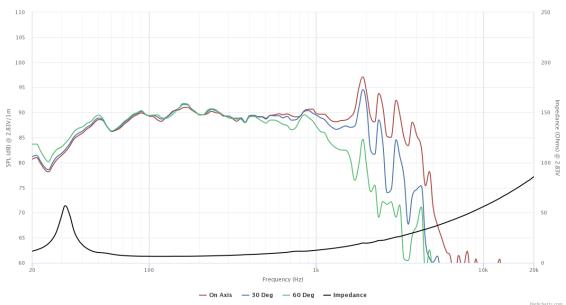
Rubber Surround







| SPECIFICATIONS                             |                   |             |                 |
|--|-------------------|-------------|-----------------|
| Transducer Size                            |                   | 12          | in              |
| Impedance                                  |                   | 8           | Ω               |
| Frequency Range <sup>1</sup>               |                   | 20 - 1000   | Hz              |
| Sensitivity <sup>2</sup> (2.83V   1W @ 1m) |                   | 88.7   88.7 | dB              |
| Power Rating (IEC 268-5)                   |                   | 100         | W               |
| Voice Coil Size                            |                   | 38.4        | mm              |
| Air Gap   Winding Height                   | H H Vc            | 8   24.5    | mm              |
| Net Weight                                 |                   | 3.24        | kg              |
| PARAMETERS <sup>3</sup>                    |                   |             |                 |
| Eff. Piston Area                           | S <sub>d</sub>    | 523         | cm <sup>2</sup> |
| DC Resistance                              | R <sub>e</sub>    | 5.6         | Ω               |
| Minimum Impedance                          | Z <sub>min</sub>  | 6.5         | Ω               |
| Inductance                                 | L <sub>e</sub>    | 1.12        | mH              |
| Resonance Frequency <sup>4</sup>           | F <sub>s</sub>    | 34          | Hz              |
| Mechanical Q Factor                        | Q <sub>ms</sub>   | 9.98        | -               |
| Electrical Q Factor                        | $Q_{es}$          | 0.678       | -               |
| Total Q Factor                             | Q <sub>ts</sub>   | 0.64        | -               |
| Moving Mass                                | M <sub>ms</sub>   | 78.5        | g               |
| Compliance                                 | C <sub>ms</sub>   | 280         | μm/N            |
| <b>Equivalent Volume</b>                   | V                 | 107         | L               |
| Motor Force Factor                         | ВІ                | 11.8        | Tm              |
| Motor Efficiency                           | β                 | 24.8        | $(BI)^2/R_e$    |
| Linear Excursion <sup>5</sup>              | X<br>max          | 10.9        | mm              |
| Max Mechanical Excursion <sup>6</sup>      | X <sub>mech</sub> | -           | mm              |



Details on this spec sheet are for reference only and should not be used for setting production limits. Specifications and product cosmetics are subject to change without notice. Peerless is a registered trademark of Tymphany Enterprises. All measurements conducted in test lab at 25°C ±10°C, 50%RH ±10%. <sup>1</sup> Specified by Engineering as linear working range of transducer. <sup>2</sup> Measured at 2.83V at 1m and normalized to 1W with respect to nominal impedance. <sup>3</sup> Measured in Free Air without preconditioning, therefore subject to some deviation. <sup>4</sup> Impedance and Fs value measured under different conditions. <sup>5</sup> Equal/Overhung:  $(H_{vc} - H_{ag})/2 + H_{ag}/3$ . Underhung:  $(H_{ag} - H_{vc})/2 + H_{vc}/3$ . <sup>6</sup> Mechanically limited excursion (e.g. bottoming, spider crash).