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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **Driver Specification Sheet**



Model No: HDS-P830992 Rev: 1

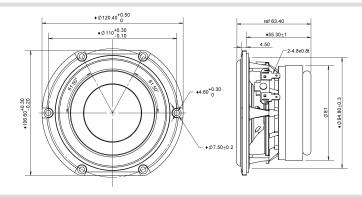
Product Line: Peerless Last Update: 2017-04-21 12:39:42

#### **Product Description**

This 4 inch 8 ohm driver is a member of the high performance HDS family. A powerful ferrite magnet system is coupled to a finite element analysis designed suspension system, containing both a linear spider design and a rubber surround. The motor contains an aluminium shorting ring, which reduces coil inductance, thus providing both extended frequency response performance and reduced distortion. The long-throw voice coil ensures linear high excursion performance, needed for signal clarity. The cone necks are vented so as to reduce air compression effects under high excursion conditions. The cast aluminium basket offers structural rigidity, heat sinking capacity for the motor, and additional air venting under the spider so as to again reduce air compression effects. The cone in this model is a glass fibre composite, offering a unique visual and acoustic experience.



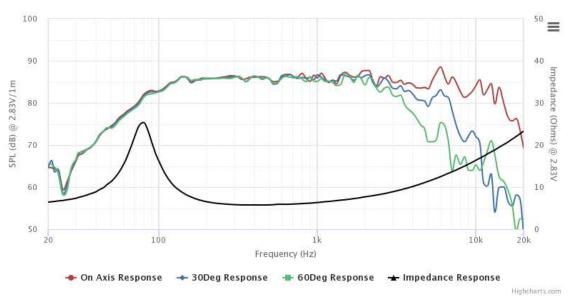
### **Mechanical Drawing**



### **Specifications**

| DC Resistance                 | Revc        | Ohms   | 5.25   | 5.0%      | Energy Bandwidth Product   | EBP         | (1/Qes)*fs   |       |
|-------------------------------|-------------|--------|--------|-----------|----------------------------|-------------|--------------|-------|
| Minimum Impedance             | Zmin        | Ohms   | 5.75   | 7.5%      | Moving Mass                | Mms         | g            | 5.9   |
| Voice Coil Inductance         | Le          | mH     | 0.24   |           | Suspension Compliance      | Cms         | um/N         | 545.9 |
| Resonant Frequency            | Fs          | Hz     | 88.61  | 15%       | Effective Cone diameter    | D           | cm           | 8.45  |
| Mechanical Q Factor           | Qms         |        | 2.95   |           | Effective Piston Area      | Sd          | cm^2         | 56.1  |
| Electrical Q Factor           | Qes         | 0.72   |        |           | Effective Volume           | Vas         | L            | 2.41  |
| Total Q Factor                | Qts         |        | 0.58   |           | Motor Force Factor         | BL          | Tm           | 4.91  |
| Ratio Fs/Qts                  | F           | Fs/Qts | 153.83 |           | Motor Efficiency Factor    | ß           | (T*M^2)/Ohms | 4.6   |
| Half Space Sensitivity @2.83V | db@2.83V/1M | dB     | 86.12  | +/- 1.0db | Voice coil former Material | VCfm        |              | ASV   |
| Half Space Sensitivity @1W/1M | db@1W/1M    | dB     | 84.7   | +/- 1.0db | Voice coil inner diameter  | VCd         | mm           | 25.73 |
| Gap Height                    | Gh          | mm     | 6      |           | Rated Noise Power          | Р           | W            | 30    |
| Maximum Linear Excursion      | Xmax        | mm     | 3      |           | Test Spectrum Bandwidth    | 20Hz - 5kHz |              |       |
| Ferrofluid Type               | FF          |        |        |           | Driver Size                | Inch        | 4 in         |       |
| Driver Mass                   | Kg          | 0.91   |        |           |                            |             |              |       |

#### Frequency and Impedance Response



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