

# HDS Exclusive 51/4" Midwoofer



Type Number: 830882

#### Features:

This High Definition Sound (HDS) line of products push the performance limits of midbass audio transducers in a range of sizes - from the standard 205mm (8-inch) model, down to the very small 106mm (4-inch) model. Feature-rich and utilizing copper for the lowest distortion possible, the high-end HDS Exclusive Series takes maximum advantage of over 80 years of R&D experience to help systems designers build the world's best audio products.



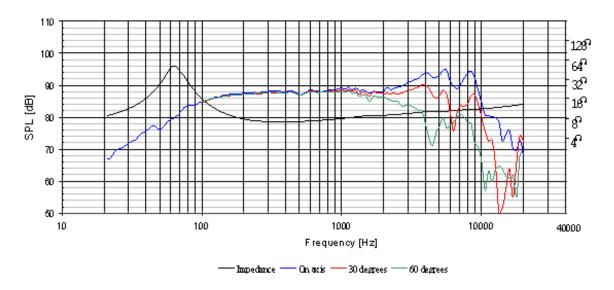


Driver Highlights: Nomex diaphragm, 26 mm coil, AL, CU, Phaseplug

### Specs:

| Electrical Data         |      |      |                 | Power handling                   |      |      |
|-------------------------|------|------|-----------------|----------------------------------|------|------|
| Nominal impedance       | Zn   | 8    | ohm             | 100h RMS noise test (IEC)        |      | W    |
| Minimum impedance       | Zmin | 6.7  | ohm             | Long-term Max System Power       |      | W    |
| Maximum impedance       | Zo   | 58.3 | ohm             | (IEC)                            |      |      |
| DC resistance           | Re   | 5.9  | ohm             | Max linear SPL (rms) @ power     |      | dB/W |
| Voice coil inductance   | Le   | 8.0  | mH              | Short Term Max power             |      | W    |
| T-S Parameters          |      |      |                 | Voice Coil and Magnet Parameters |      |      |
| Resonance Frequency     | fs   | 64.5 | Hz              | Voice coil diameter              | 26   | mm   |
| Mechanical Q factor     | Qms  | 3.85 |                 | Voice coil height                | 13   | mm   |
| Electrical Q factor     | Qes  | 0.43 |                 | Voice coil layers                | 2    |      |
| Total Q factor          | Qts  | 0.39 |                 | Height of the gap                | 6    | mm   |
| Ratio fs/Qts            | F    | 165  |                 | Linear excursion +/-             | 3.5  | mm   |
| Force factor            | BI   | 7    | Tm              | Max mech. excursion +/-          |      | mm   |
| Mechanical resistance   | Rms  | 0.93 | Kg/s            | Flux density of gap              |      | mWb  |
| Moving mass             | Mms  | 8.8  | g               | Total useful flux                | 0.89 | mWb  |
| Suspension compliance   | Cms  | 0.69 | mm/N            | Diameter of magnet               | 90   | mm   |
| Effective cone diameter | D    | 10.5 | cm              | Height of magnet                 | 15   | mm   |
| Effective piston area   | Sd   | 87   | cm <sup>2</sup> | Weight of magnet                 | 0.4  | Kg   |
| Equivalent volume       | Vas  | 7.2  | Itrs            |                                  |      |      |
| Sensitivity             |      | 88.2 | dB              |                                  |      |      |
| Ratio BL/√(Re)          |      | 2.9  |                 |                                  |      |      |

## Frequency:



#### **Mechanical Dimensions:**

