

## KEY FEATURES:

99 db 1W / 1m average sensitivity
77 mm high temperature aluminium voice coil
900 W AES program power
Powerful, vented 180 mm magnet structure
Double aluminium demodulating rings for lower distortion and improved heat dissipation
Silicone spider

## Application : Woofer

The 12B450 loudspeaker is combining very good linearity and efficiency with high power handling capabilities, with use of 77 mm aluminium voice coil. It features vented aluminium die cast frame, 180 mm magnet structure and curvilinear paper cone. 12B450 is suitable for application as LF driver in small stage monitors and 2way PA boxes with 1` ${ }^{\text {' HF driver. }}$

SPECIFICATIONS

| Nominal Diameter | 12 "/315 inch/mm |
| :--- | :--- |
| Impedance | 8 Ohm |
| Minimum Impedance | 6.22 Ohm |
| Power Capacity AES 1 | 450 W |
| Program Power 2 | 900 W |
| Sensitivity | $(200-2000 \mathrm{~Hz}) 99 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ |
| Frequency Range | $50-3000 \mathrm{~Hz}$ |
| Voice Coil Diameter | 77 mm |
| Voice Coil Material | Aluminium |
| Voice Coil Former | Kapton |
| Voice Coil Winding Depth | 21 mm |
| Magnet Gap Depth | 11 mm |
| Cone Material | Paper |
| Basket | Die cast aluminium |
| Magnet | Ferrite |
| Flux Density | $1.20 ~ T$ |

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 65 L box enclosure tuned 63 Hz using a 40-400 Hz band limited pink noise test signal applied continuously for 2 hours.
2. Program power is defined as 3db greater than AES Power Capacity

* Linear Mathematical Xmax is calculated as: $(\mathrm{Hvc}-\mathrm{Hg}) / 2+\mathrm{Hg} / 4$ where Hvc is the voice coil depth and Hg is the gap depth.


## THIELE-SMALL PARAMETERS

| Resonance Frequency | 46.29 Hz |
| :--- | :--- |
| Mechanical Efficiency Factor (Qms) | 9.56 |
| Electrical Efficiency Factor (Qes) | 0.241 |
| Total Q (Qts) | 0.235 |
| Equivalent Air Volume (Vas ) | 71.75 Litres |
| Diaphragm mass ind. airload (Mms) | 60.97 grams |
| Voice Coil Resistance Re | 5.07 Ohms |
| Effective Diagram Area (Sd) | $514.7 \mathrm{~cm}^{2}$ |
| Peak Linear Displacement of Diaphragm (Xmax)* | $\pm 7.75 \mathrm{~mm}$ |
| Mechanical Compliance of Suspension (Cms) | $0.194 \mathrm{~mm} / \mathrm{N}$ |
| BL Product (BL) | $19.31 \mathrm{T.m}$ |
| V.C. Inductance at 1 kHz (Le) | 1.10 mH |

## MOUNTING INFORMATION

| Overall Diameter | 315 mm |
| :--- | :--- |
| Baffle Hole Diameter | 280 mm |
| Number of Mounting Holes | 8 eliptic $7 \times 8 \mathrm{~mm}$ |
| Bolt Circle Diameter | $296 / 298 \mathrm{~mm}$ |
| Overall Depth | 153 mm |
| Net Weight | 7.5 kg |

## OBERTON <br> Professional Loudspeakers



Frequency Responce


