

## $99 \mathrm{db} 1 \mathrm{~W} / 1 \mathrm{~m}$ average sensitivity

77 mm high temperature aluminium voice coil
800 W AES program power
Powerful, ferrite $\mathbf{1 8 0} \mathbf{~ m m}$ magnet structure

## Application : Power midbass speaker

The 10MB300 loudspeaker is primary designed to be used in medium and long throw horn loaded systems. The special Kevlar paper cone guarantees reliable using in horns with compression chamber with ratio up to 3.5:1.

SPECIFICATIONS

| Nominal Diameter | $10 " / 262 \mathrm{inch} / \mathrm{mm}$ |
| :--- | :--- |
| Impedance | 80 hm |
| Minimum Impedance | 6.52 Ohm |
| Power Capacity AES $^{1}$ | 400 W |
| Program Power $^{2}$ | 800 W |
| Sensitivity | $(200-2000 \mathrm{~Hz}) 99 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ |
| Frequency Range | $80-2500 \mathrm{~Hz}$ |
| Voice Coil Diameter | 77 mm |
| Voice Coil Material | Aluminium |
| Voice Coil Former | Kapton ${ }^{\text {m }}$ |
| Voice Coil Winding Depth | 15 mm |
| Magnet Gap Depth | 9 mm |
| Cone Material | Kevlar Paper |
| Basket | Die cast aluminium |
| Magnet | Feritte |
| Flux Density | 1.33 T |

## MOUNTING INFORMATION

| Overall Diameter | 262 mm |
| :--- | :--- |
| Baffle Hole Diameter | 228 mm |
| Number of Mounting Holes | 8 with dia. 7 mm |
| Bolt Circle Diameter | 244 mm |
| Overall Depth | 120 mm |
| Net Weight | 6.8 kg |

## THIELE-SMALL PARAMETERS

| Resonance Frequency | 64.70 Hz |
| :--- | :--- |
| Mechanical Efficiency Factor (Qms) | 9.66 |
| Electrical Efficiency Factor (Qes) | 0.251 |
| Total Q (Qts) | 0.244 |
| Equivalent Air Volume (Vas ) | 22.75 Litres |
| Diaphragm mass ind. airload (Mms) | 38.13 grams |
| Voice Coil Resistance Re | 5.43 Ohms |
| Effective Diagram Area (Sd) | 317.3 cm 2 |
| Peak Linear Displacement of Diaphragm (Xmax)* | $\pm 5.25 \mathrm{~mm}$ |
| Mechanical Compliance of Suspension (Cms) | $0.159 \mathrm{~mm} / \mathrm{N}$ |
| BL Product (BL) | $18.32 \mathrm{T.m}$ |
| V.C. Inductance at 1 kHz (Le) | 0.72 mH |

[^0]
## OBERTON <br> Professional Loudspeakers



Frequency Responce



OBERTON<br>model: 10MB300


[^0]:    1. AES standard. Power is calculated on rated minimum impedance. Measurement is
    in 30 L box enclosure tuned 60 Hz using a $50-1000 \mathrm{~Hz}$ band limited pink noise test
    signal applied continuously for 2 hours.
    2. Program power is defined as $3 d b$ 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.

