

# MID-BASS MB12N351

Professional Low Frequency Transducer

PART NUMBER **11100026**

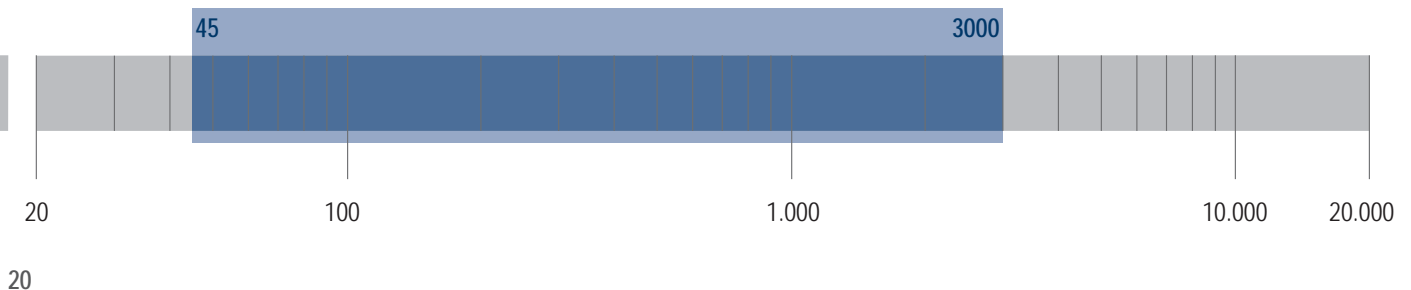
The MB12N351 is designed to provide an excellent frequency response linearity with very low distortion. A very strong neodymium magnetic structure guarantee dynamic and precision, a new and unique 3,5" voice coil design provides a very high power handling, especially recommended in comparison to a standard 3" voice coil. The unique Dual-forced air venting system guarantee a very efficient voice coil ventilation to minimize the power compression and provide higher power handling.

## Features

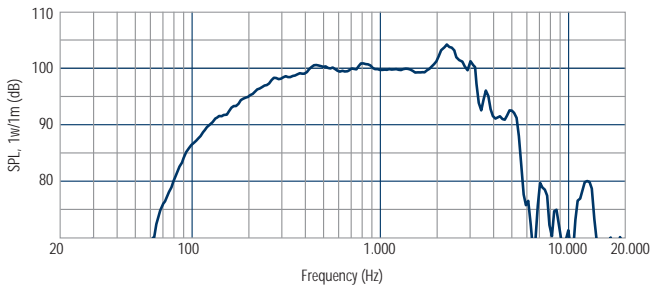
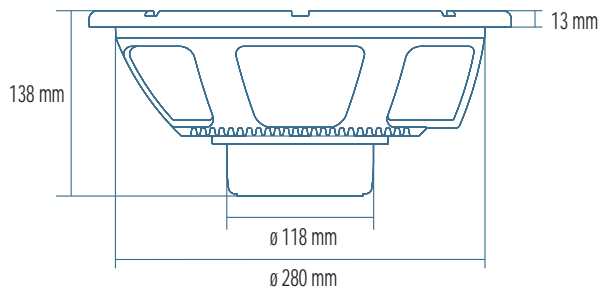
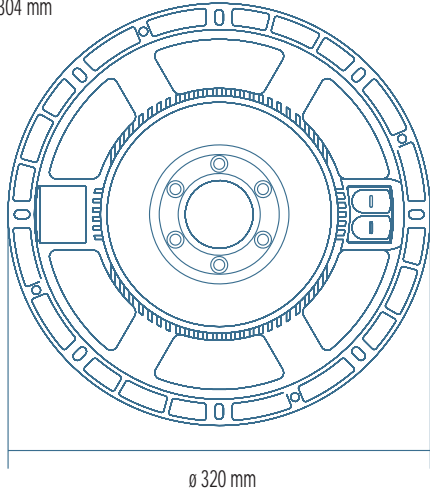
- 3,5-inch, inside-outside copper voice coil
- 1300 Watt continuous program power handling
- 99 dB Sensitivity
- 45 Hz - 3 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Single spider design with silicon based damping control

## Applications

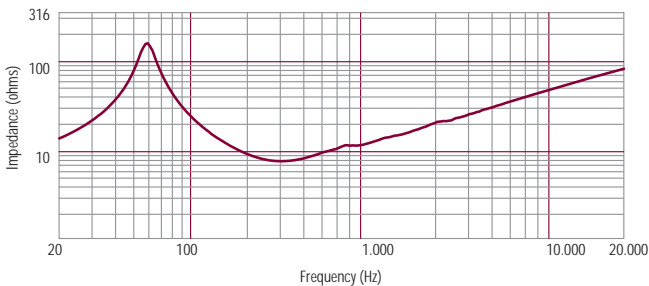
The MB12N351 is ideal for use in applications where is required a very high efficiency and linearity with high power handling. It's especially recommended for high powered multi-way system.



8 holes  $\varnothing$  6,5 mm to 45°  
on  $\varnothing$  293,5 mm and on  $\varnothing$  304 mm



Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres (21.2 cu.ft) enclosing the rear of the driver.



Impedance magnitude curve measured in free air.

## Notes to Specifications

1 Program Power is defined as 3 dB greater than AES power. - 2 AES standard. - 3 Sensitivity measurement is based on a 500-2,5 kHz pink noise signal with input power of 2.83V @ 8 Ohms. - 4 Thiele-Small parameters are measured after a 2 hour warm up period running the loudspeaker at full power handling capacity. - 5 The maximum linear excursion is calculated as:  $(Hvc - Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.

## General Specifications

|  |                 |         |
|--|-----------------|---------|
| Nominal Diameter                           | 300/12          | mm/inch |
| Rated Impedance                            | 8               | ohm     |
| Program Power <sup>1</sup>                 | 1300            | Watts   |
| Power handling capacity <sup>2</sup>       | 650             | Watts   |
| Sensitivity <sup>3</sup>                   | 99              | dB      |
| Frequency Range                            | 45 - 3000       | Hz      |
| Effective Piston Diameter                  | 260/10.2        | mm/inch |
| Max Excursion Before Damage (peak to peak) | 39/1.5          | mm/inch |
| Minimum Impedance                          | 7.0             | ohm     |
| Voice Coil Diameter                        | 87/3.4          | mm/inch |
| Voice Coil Material                        | Copper          |         |
| Voice Coil Winding Depth                   | 16.5/0.65       | mm/inch |
| Number of layers                           | 2               |         |
| Kind of layer                              | inside/outside  |         |
| Top Plate Thickness                        | 11/0.43         | mm/inch |
| Cone Material                              | No pressed pulp |         |
| Cone Design                                | Curved          |         |
| Surround Material                          | Polycotton      |         |
| Surround Design                            | M - roll        |         |

## Thiele - Small Parameters <sup>4</sup>

|   |      |       |                |
|---|------|-------|----------------|
| Resonance frequency                               | Fs   | 55    | Hz             |
| DC resistance                                     | Re   | 5.6   | ohm            |
| Mechanical factor                                 | Qms  | 4.5   |                |
| Electrical factor                                 | Qes  | 0.21  |                |
| Total factor                                      | Qts  | 0.20  |                |
| BL Factor   | BL   | 22.5  | T · m          |
| Effective Moving Mass                             | Mms  | 54    | gr             |
| Equivalent Cas air load                           | Vas  | 61    | liters         |
| Effettive piston area                             | Sd   | 0.053 | m <sup>2</sup> |
| Max. linear excursion (mathematical) <sup>5</sup> | Xmax | 5.5   | mm             |
| Voice - coil inductance @ 1KHz                    | Le1K | 1.65  | mH             |
| Half-space efficiency                             | Eff  | 4.66  | %              |

## Mounting Information

|  |                 |            |
|--|-----------------|------------|
| Overall Diameter                           | 320/12.6        | mm/inch    |
| Bolt Circle Diameter                       | 293-304/11.5-12 | mm/inch    |
| Bolt Hole Diameter                         | 6.5/0.3         | mm/inch    |
| Front Mount Baffle Cut-out                 | 282/11.1        | mm/inch    |
| Rear Mount Baffle Cut-out                  | 284/11.2        | mm/inch    |
| Depth                                      | 138/5.4         | mm/inch    |
| Volume occupied by the driver <sup>6</sup> | 2.2/0.077       | liters/ft3 |

## Shipping Information

|                 |          |        |
|-----------------|----------|--------|
| Net Weight      | 4.4/9.7  | Kg/Lbs |
| Shipping Weight | 5.2/11.4 | Kg/Lbs |