

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.

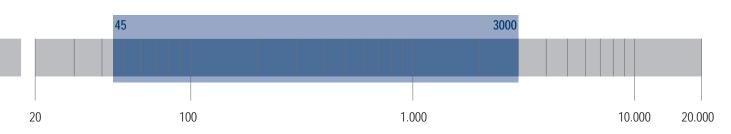
## **Features**

- 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**

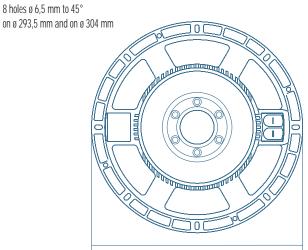
The MB12N351 is ideal for use in applications where is required a very high efficiency and linearity with high power handling. It's especially recommended for high powered multi-way system.

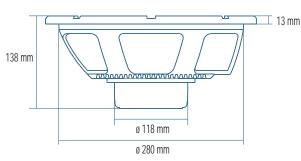




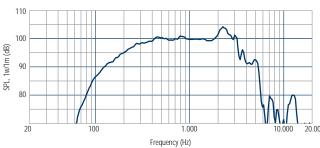




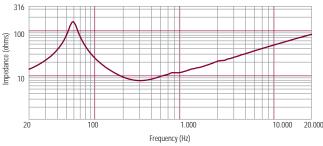




ø 320 mm



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.

#### **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 4

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	$T\cdot m$
Effective Moving Mass	Mms	54	gr
Equivalent Cas air load	Vas	61	liters
Effettive piston area	Sd	0.053	$m^2$
Max. linear excursion (mathematical) 5	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	Ka/Lbs

#### 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.