

# MID-BASS MB15N407

Professional Low Frequency Transducer

PART NUMBER **11100075**

## Features

- 1400 Watt continuous program power handling
- 4-inch , fibreglass inside-outside copper voice coil
- 99.5dB Sensitivity
- 40Hz –2.5KHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Triple-roll surround and exponential cone geometry
- Ultra lightweight 4”

The MB15N407 is a ultra lightweight , shallow design, 15” neodymium mid-bass driver. The vented 4” voice coil design and the minimum weight make the MB15N407 a unique product in his category.

The new hyper-vented aluminium basket and magnetic assembly design provide an excellent heat dissipation and lower power compression. Special air-forced ventilations are provided for voice coil, magnet assembly and basket.

A large neodymium magnet disc powers the magnetic structure providing an extremely high flux density in the gap.

The Triple-roll surround offers a great displacement linearity and a precise control of the cone.

The inside-outside copper voice coil design offers large signal linearity and great reliability.

The waterproof body cone treatment and polycotton surround ensure a durable performance in every application.

## Applications

The MB15N407 is ideal in applications where very high power handling, very high efficiency and system portability are required.

Perfect for mid-bass applications in compact two-way or three-way systems.



40 2500

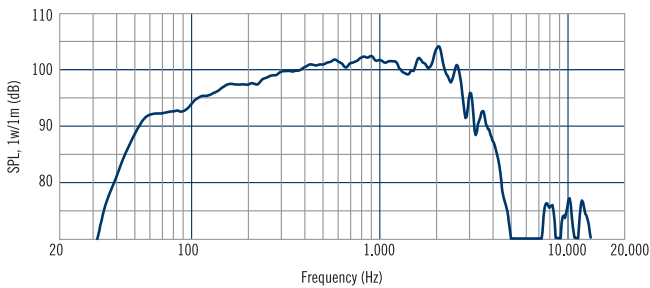
20

100

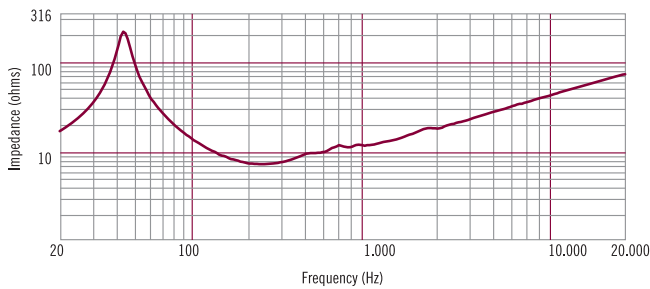
1.000

10.000

20.000



Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 80 litres and tuned at 50Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

## General Specifications

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	1400	Watts
Power handling capacity <sup>2</sup>	700	Watts
Sensitivity <sup>3</sup>	99.5	dB
Frequency Range	40 - 2500	Hz
Effective Piston Diameter	340/13.4	mm/inch
Max Excursion Before Damage (peak to peak)	40/1.57	mm/inch
Minimum Impedance	6.4	ohm
Voice Coil Diameter	100/4.0	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	19/0.75	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	12/0.47	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	Triple-roll	

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

Resonance frequency	Fs	45	Hz
DC resistance	Re	5.0	ohm
Mechanical factor	Qms	7.7	
Electrical factor	Qes	0.21	
Total factor	Qts	0.20	
BL Factor	BL	26.8	T · m
Effective Moving Mass	Mms	106	gr
Equivalent Cas air load	Vas	120	liters
Effettive piston area	Sd	0.091	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	6.5	mm
Voice - coil inductance @ 1KHz	Le1K	1.6	mH
Half-space efficiency	Eff	5.05	%

## Mounting Information

Overall Diameter	388/15.3	mm/inch
Bolt Circle Diameter	369-373.5/14.5-14.7	mm/inch
Bolt Hole Diameter	5.5/0.22	mm/inch
Front Mount Baffle Cut-out	364/14.33	mm/inch
Rear Mount Baffle Cut-out	360/14.17	mm/inch
Depth	150/5.91	mm/inch
Volume occupied by the driver <sup>6</sup>	3.4/0.12	liters/ft3

## Shipping Information

Net Weight	4.9/10.80	Kg/Lbs
Shipping Weight	5.9/13.01	Kg/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.