MID-BASS
MB10N251

Professional Low Frequency Transducer

The MB10N251 is a 10" neodymium mid-bass driver with an excellent linearity, good efficiency and high power handling capabilities. The 2,5" aluminium voice coil combined with a high strength fibreglass former allows high efficiency and good frequency response extension. Aluminium basket and magnetic assembly design provide an excellent heat dissipation and very low power compression. The M-roll surround shape combined to spider design offer good linear displacement and precise low frequency reproduction.

PART NUMBER **11100064**

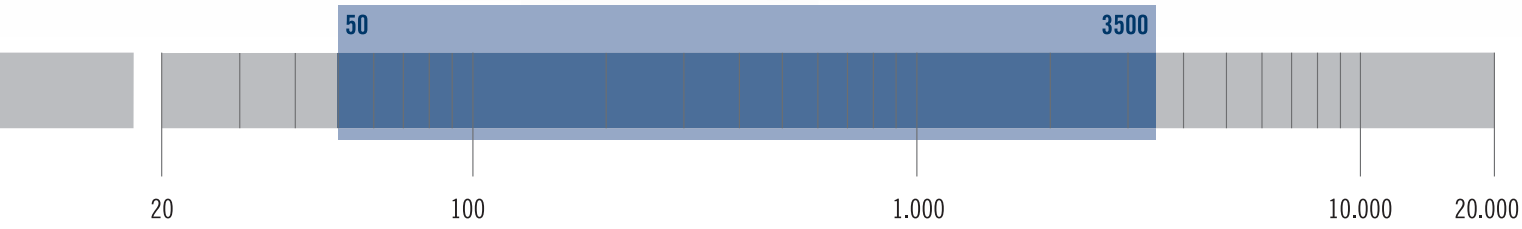
Features

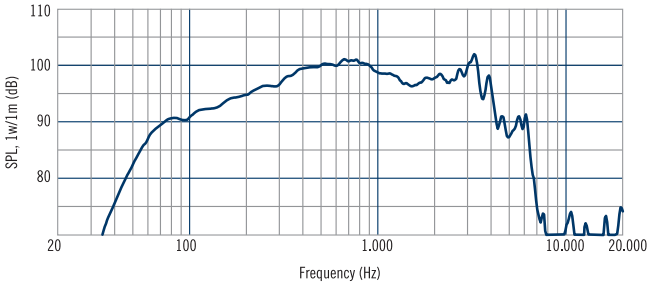
- 2.5-inch , fibreglass former, aluminium voice coil
- 600 Watt continuous program power handling
- 97dB Sensitivity
- 50Hz –3.5KHz Frequency range
- Forced air ventilation
- M-roll surround and exponential cone geometry

The waterproof body cone treatment ensures a durable performance in every application.

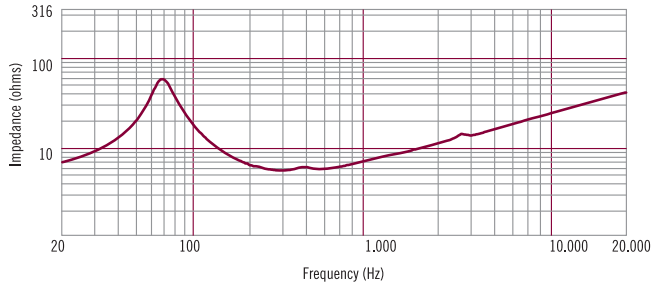
Applications

The MB10N251 finds its application in compact 2-way bass reflex system where very high dynamic and power handling are required.
Perfect for multi-way reflex enclosures such as line arrays.





Frequency response curve of the loudspeaker make in a hemispherical, free field and mounted in a reflex box with an internal volume of 30 litres and tuned at 55Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

General Specifications

Nominal Diameter	250/10	mm/inch
Rated Impedance	8	ohm
Program Power [1]	600	Watts
Power handling capacity [2]	300	Watts
Sensitivity [3]	97	dB
Frequency Range	50 - 3500	Hz
Effective Piston Diameter	210/8.27	mm/inch
Max Excursion Before Damage (peak to peak)	40/1.57	mm/inch
Minimum Impedance	6.4	ohm
Voice Coil Diameter	64/2.51	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	14/0.55	mm/inch
Number of layers	1	
Kind of layer	outside	
Top Plate Thickness	9/0.35	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	5.1	ohm
Mechanical factor	Qms	4.2	
Electrical factor	Qes	0.29	
Total factor	Qts	0.27	
BL Factor	BL	15.2	T · m
Effective Moving Mass	Mms	36	gr
Equivalent Cas air load	Vas	38.8	liters
Effettive piston area	Sd	0.035	m^2
Max. linear excursion (mathematical) [5]	Xmax	4.8	mm
Voice - coil inductance @ 1KHz	Le1K	1.3	mH
Half-space efficiency	Eff	2.20	%

Mounting Information

Overall Diameter	260/10.24	mm/inch
Bolt Circle Diameter	241-246/9.5-9.6	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	234/9.21	mm/inch
Rear Mount Baffle Cut-out	234/9.21	mm/inch
Depth	113/4.45	mm/inch
Volume occupied by the driver [6]	1.2/0.04	liters/ft3

Shipping Information

Net Weight	2.2/4.85	Kg/Lbs
Shipping Weight	2.4/5.29	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.