

MID-BASS

# MB10G251

Professional Low Frequency Transducer

The MB10G251 is designed to provide an excellent frequency response linearity with very low distortion. A strong magnetic structure guarantee dynamic and precision. M-roll surround and spider design offer great linearity and precise reproduction.

PART NUMBER **11100110**

- 2.5-inch, fibreglass former, aluminium voice coil
- 600 W continuous program power handling
- 98.5 dB Sensitivity
- 55 Hz – 3.0 kHz Frequency range
- M-roll surround and exponential cone geometry

## APPLICATIONS

A very light moving mass, a curve response linear above 3 kHz makes the MB10G251 a very good solution for high quality two way systems.

The 2.5" aluminium voice coil guarantee a very high power handling and perfect low frequency control.



55

3000

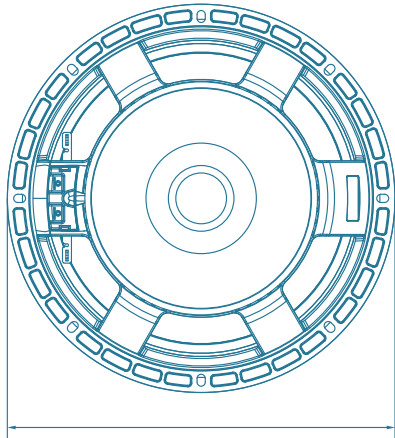
20

100

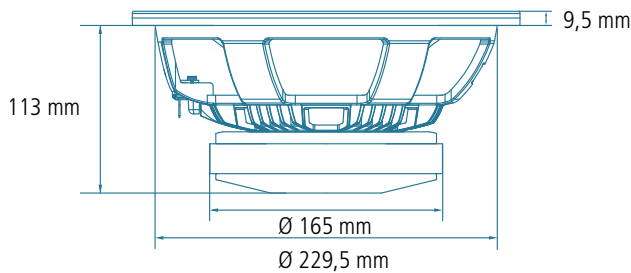
1.000

10.000

20.000



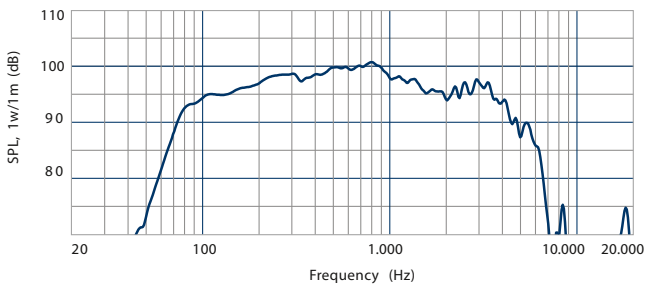
Ø 260 mm



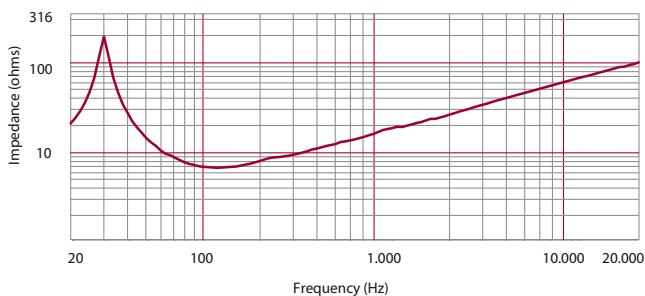
113 mm

9,5 mm

Ø 165 mm  
Ø 229,5 mm



Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 litres and tuned at 60Hz, 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 <sup>1</sup>	600	Watts
Power handling capacity <sup>2</sup>	300	Watts
Sensitivity <sup>3</sup>	98,5	dB
Frequency Range	55-3000	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 / 2,5	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	18 / 0,71	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	8 / 0,31	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	76	Hz
DC resistance	Re	5,2	ohm
Mechanical factor	Qms	8	
Electrical factor	Qes	0,35	
Total factor	Qts	0,34	
BL Factor	BL	14,9	T · m
Effective Moving Mass	Mms	32,5	gr
Equivalent Cas air load	Vas	24	liters
Effective piston area	Sd	0,035	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	7,0	mm
Voice - coil inductance @ 1KHz	Le	0,5	mH
Half-space efficiency	Eff	2,71	%

## 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	232 / 9,13	mm/inch
Rear Mount Baffle Cut-out	232 / 9,13	mm/inch
Depth	113 / 4,45	mm/inch
Volume occupied by the driver <sup>6</sup>	1,2 / 0,04	liters/ft3

## SHIPPING INFORMATION

Net Weight	4,8 / 10,5	Kg/Lbs
Shipping Weight	5,8 / 12,6	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:  $(Hvc \cdot Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.

The data are not binding; RCF reserves the right to modify the data at any time and without previous notice.