

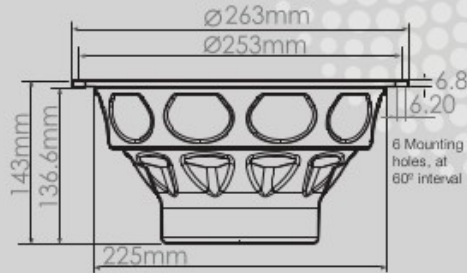


MW1054

Classic Advanced Sub Woofer

Ø 10", Ø 5.1" Voice Coil, 4Ω

This woofer / subwoofer based on Morel's renowned MW series. This woofer offers 5.1" diameter voice coil and double vented ferrite magnets resulting in higher power handling than any other woofer in its price category. with a sturdy laminated carbon/paper cone.



SPECIFICATION

General Data

Overall Dimensions	DxH	263mm X 143mm(10.35" X 5.63")
Nominal Power Handling (DIN)	P	500 Watt
Transient Power 10ms		1500 Watt
Sensitivity 2.83V / 1M		88 dB SPL
Frequency Response		See graph
Cone Material		Carbon Fiber Laminated Paper
Net Weight	Kg	6.1 kg

Electrical Data

Nominal Impedance	Z	4Ω
DC Resistance	Re	2.82Ω
Voice Coil Inductance @ 1KHz	Le	1.07 mH

Voice Coil and Magnet Parameters

Voice Coil Diameter	D	130 mm (5.1")
Voice Coil Height		32 mm (1.2")
Magnetic Gap Height	HE	12 mm (0.47")
Max. Linear Excursion	X_{max}	± 10mm (0.39")
Voice Coil bobbin		Aluminum
Voice Coil Wire		Hexatech™ 100% Aluminum
Number Of Layers		2
Magnet System Type		Double Magnet Vented
Magnetic Flux Density	B	0.61 T
BL Product	B·L	11.1 T·M

T-S Parameters

3 volt

Suspension Compliance	C_{ms}	0.35 mm/N
Mechanical Q Factor	Q_{ms}	1.5
Electrical Q Factor	Q_{es}	0.4
Total Q Factor	Q_{ts}	0.31
Mechanical Resistance	R_{ms}	11.3 N·S/M
Moving Mass	M_{ms}	104.6 g
Equivalent Air Volume	V_{as}	60 Ltr
Resonance Frequency	F_s	26 Hz
Effective Piston Area	S_d	346 cm ²

FEATURES

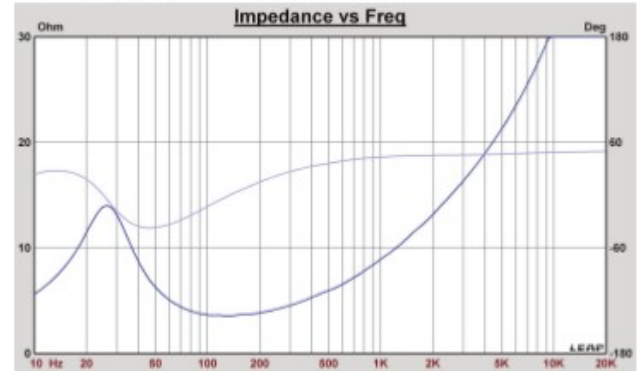
- ▶ Extreme power handling
- ▶ 5.1" voice coil
- ▶ Aluminum hexatech V.C
- ▶ 2 layer laminated carbon paper cone
- ▶ 2" magnet venting hole
- ▶ high X max

FREQUENCY



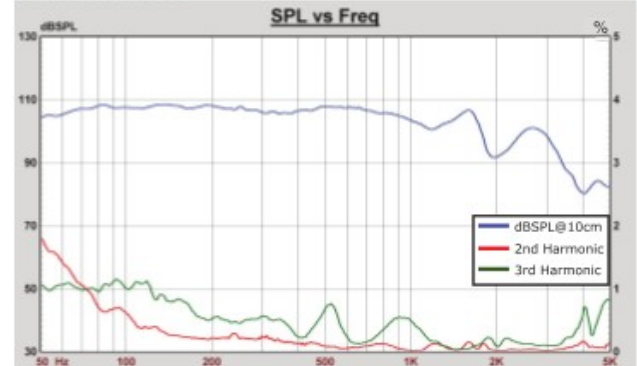
The graph above shows the measured sound pressure level on axis (0 degrees) in the low frequency (20 - 500Hz), using a 30Ltr sealed box. Response is measured in near field, and normalized to 1m, 2π radiation, 1/12 octave smoothing is applied. Input voltage is 2.83V RMS. Sensitivity is calculated at 100Hz on axis.

IMPEDANCE



driver is mounted rigidly in free air with no baffle or enclosure. Input signal is a stepped sinusoidal at 5VRMS. Impedance is measured using constant-voltage method. No smoothing is applied.

DISTORTION



distortion is measured using a 30Ltr sealed box. Microphone is placed 10cm from the driver. Input signal is a stepped sinusoidal calibrated to 1Watt. 2nd and 3rd harmonics are shown alongside the frequency response as recorded in this setting.