



# CHALLENGER™ Series II C-12MB



## Applications

### C-12MB

The C-12MB has been designed specifically for use as a mid basstransducer. This 12 inch (315mm) diameter driver has been optimized for use as either a direct radiator mid bass driver or for use in a hornloaded mid bass design. The Challenger series II C-12MB is optimized for a combination of low frequency response and efficiency. The C-12MB has been designed for maximum efficiency thru the operating range of 60Hz to 2000Hz. The frequency range of 120Hz to 2000Hz is the critical mid band range where vocal fundamentals as well as fundamentals of most musical instruments are found. This area is critical to system clarity and intelligibility and the C-12MB, with its newly developed highly damped cone material, is optimized.

The large format 4 inch (101.6mm) voice coil diameter produces a large cross sectional area for maximum heat transfer and power compression. The rectangular geometry voice coil provided a professional level of power handling and critical reliability. Like all models in the Challenger Series II, the C-12MB features a large diameter Ferrite based permanent magnet coupled to an aluminum die cast chassis. Because of its very high efficiency design, the C-12MB is designed for mid bass applications only. For system designs where additional bass is required the C-12MB is a superior choice.

## Specifications

### GENERAL SPECIFICATIONS

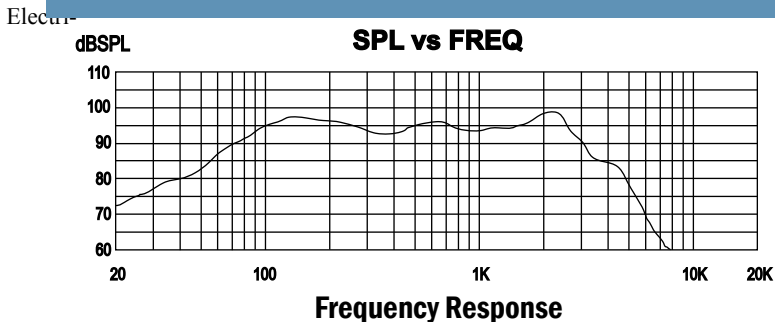
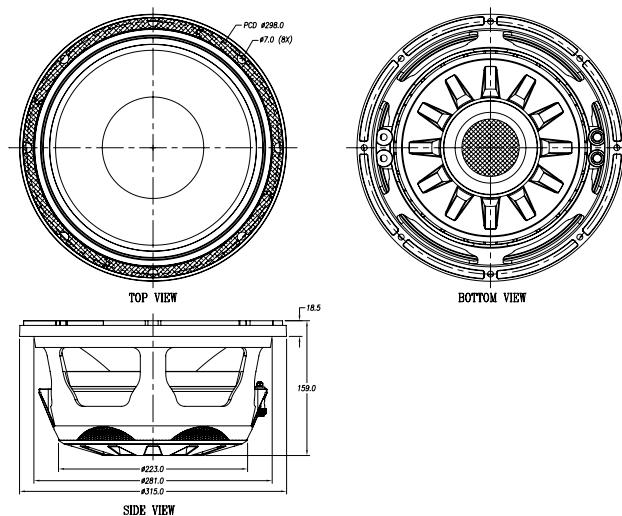
Nominal Impedance	8 Ω
Power	800 Watt (rms)
SPL 1W@1M average sensitivity	96 dB
Frequency Response	60Hz - 2000Hz
Dimension Ø x H (cm)	31.5 x 15.9
Net Weight	11.7 kg (25.7 lbs)
Shipping Weight	12.9 kg (28.4 lbs)
Packing Dimension H x W x D (cm)	34.5 x 34.5 x 21.0 (0.9cu.ft)
	13.6" x 13.6" x 8.3"

### PHYSICAL SPECIFICATIONS

Magnet type	Ferrite
Voice Coil Diameter	101.6 mm (4 inch)

### THIELE/SMALL PARAMETERS

Resonance Frequency	Fs	61 Hz
DC. Resistance	Re	5.2 Ω
Coil Inductance	Le	0.49 mH
Mechanical Q Factor	Qms	7.10
cal Q Factor	Qes	0.45
Total Q Factor	Qts	0.42
BL Product	BL	21.37 Tm
Effective Moving Mass	Mms	103.94 g
Equivalent Cas Air-Load	Vas	28.73 Liters
Effective Piston Area	Sd	0.0530 Sqm
Half-Space Efficiency	Eff	1.37 %
Airgap Height	Hag	10.0 mm
Voice Coil Height	Hvc	20.0 mm
Voice Coil Overhang	Xmax	5.0 mm



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