

## Specification

Nominal Basket Diameter	12", 304.8mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	150W
Music Program	300W
Resonance	49Hz
Usable Frequency Range***	51Hz-4.3kHz
Sensitivity	95.6
Magnet Weight	20 oz
Gap Height	0.25", 6.35mm
Voice Coil Diameter	1.5", 38.1mm

## Thiele & Small Parameters

Resonant Frequency (fs)	49Hz
DC Resistance (Re)	6.3
Coil Inductance (Le)	0.79mH
Mechanical Q (Qms)	6.53
Electromagnetic Q (Qes)	0.88
Total Q (Qts)	0.77
Compliance Equivalent Volume (Vas)	121.5 ltr/4.3 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	125cc
Mechanical Compliance of Suspension (Cms)	0.32mm/N
BL Product (BL)	8.5 T-M
Diaphragm Mass inc. Airload (Mms)	33 grams
Efficiency Bandwidth Product (EBP)	56
Maximum Linear Excursion (Xmax)	2.4mm
Surface Area of Cone (Sd)	519.5cm <sup>2</sup>
Maximum Mechanical Limit (Xlim)	6.6mm

## Mounting Information

Recommended Enclosure Volume	
Sealed	17-22.7 ltr/0.6-0.8 cu. ft.
Vented	56.6-113.3 ltr/2-4 cu. ft.
Overall Diameter	12.26", 311.4mm
Baffle Hole Diameter	11", 279.5mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.25", 6.4mm
Mounting Holes B.C.D.	11.71", 297.5mm
Depth	4.73", 120mm
Net Weight	5.3 lbs, 2.4 kg
Shipping Weight	7.4 lbs, 3.4 kg

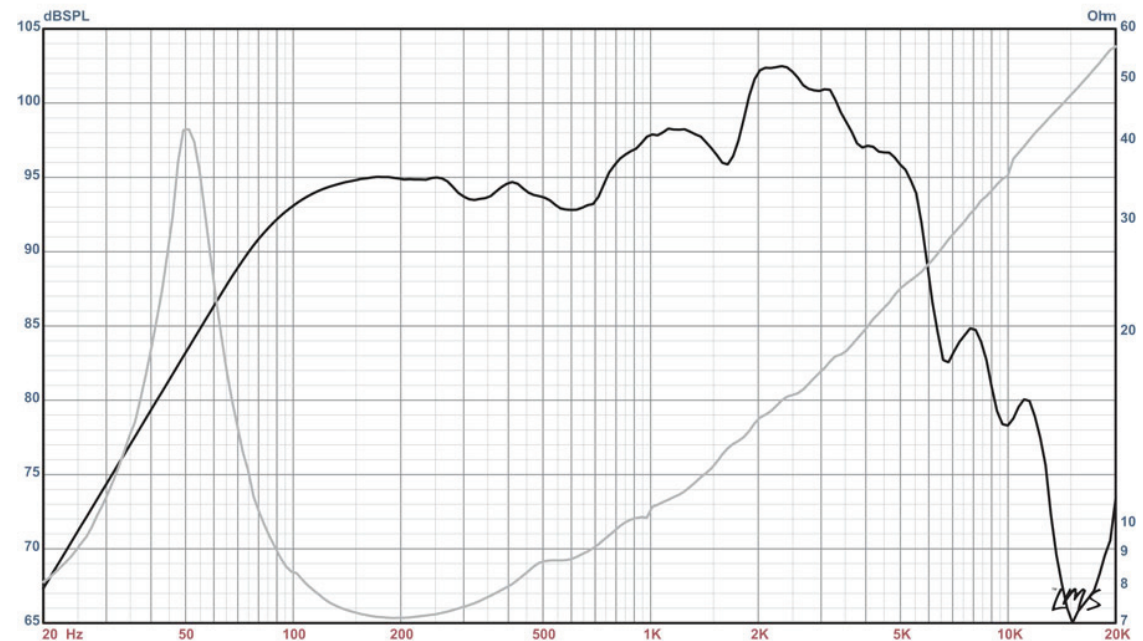
## Materials of Construction

Coil Construction	Copper
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Vented And Extended
Basket Materials	Pressed Steel
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Felt



## ALPHA-12A American Standard Series

Recommended for professional audio mid-bass applications in a small sealed or medium vented enclosure.



\* Please inquire about alternative impedances.

\*\* Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, nontemperature-controlled environment.

\*\*\* The average output across the usable frequency range when applying 1W/1m into the nominal impedance. I.e: 2.83 V/8 ohms, 4 V/16 ohms.

Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2 ft. X 2 ft. baffle is built into the wall with the speaker mounted flush against a steel ring for minimum diffraction | Hafler P1500 Trans-Nova amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges)

# Alpha12A Large Vented FR or Bass Guitar Cab

By Jerry McNutt, Eminence Speaker LLC  
50 Watts Displacement Limit; F3 of 51 Hz.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 3.8 cu.ft

V(total) = 3.883 cu.ft

Fb = 62.88 Hz

QL = 7

F3 = 50.77 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 7.508 in

Lv = 0.75 in

## Driver Properties

--Description--

Name: Alpha-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 1.5 inch (38.1 mm) copper.

Magnet: 20 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 49 Hz

Qms = 6.53

Vas = 121.5 liters

Xmax = 2.4 mm

Sd = 519.5 sq.cm

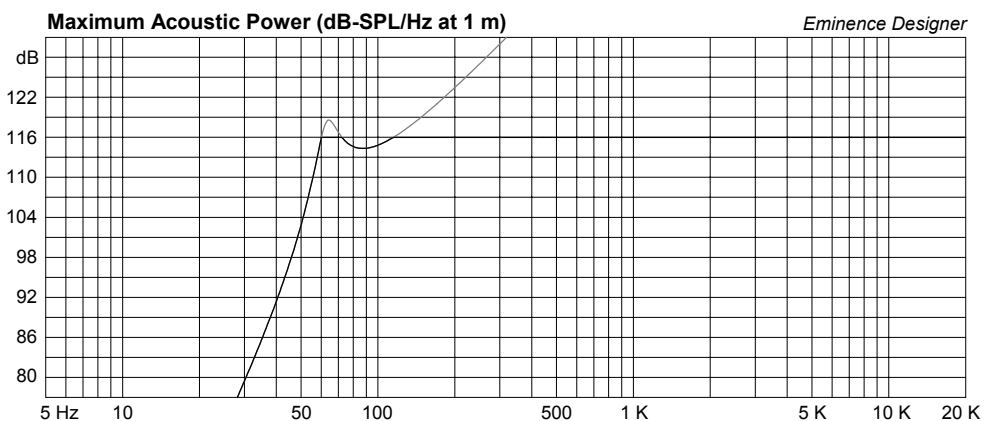
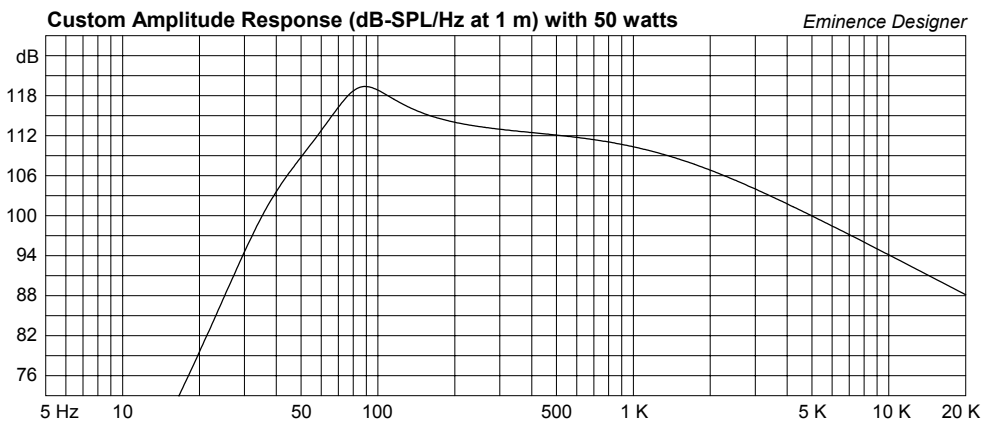
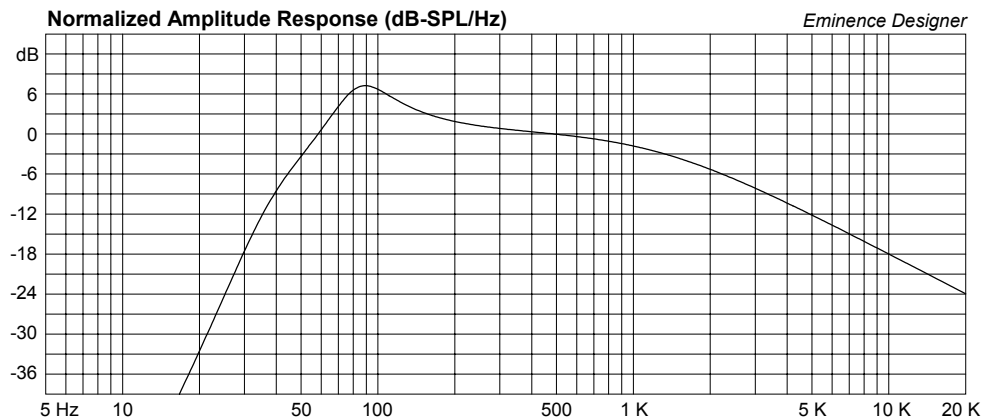
Qes = 0.88

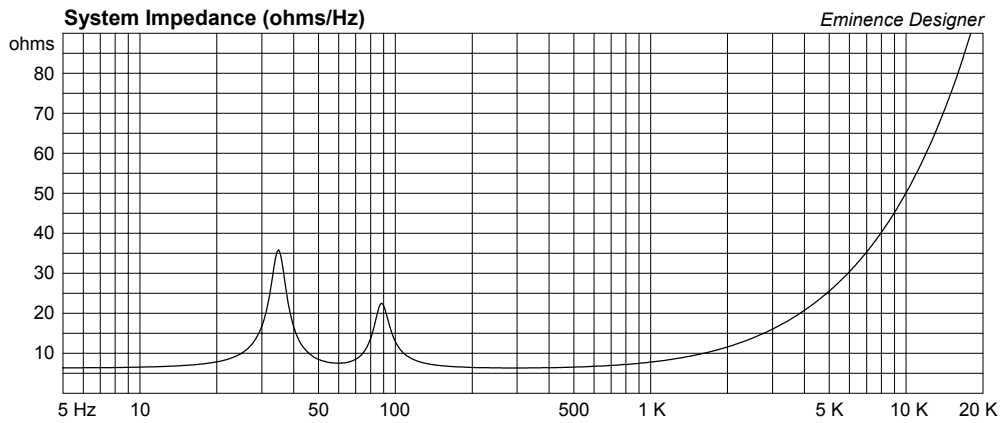
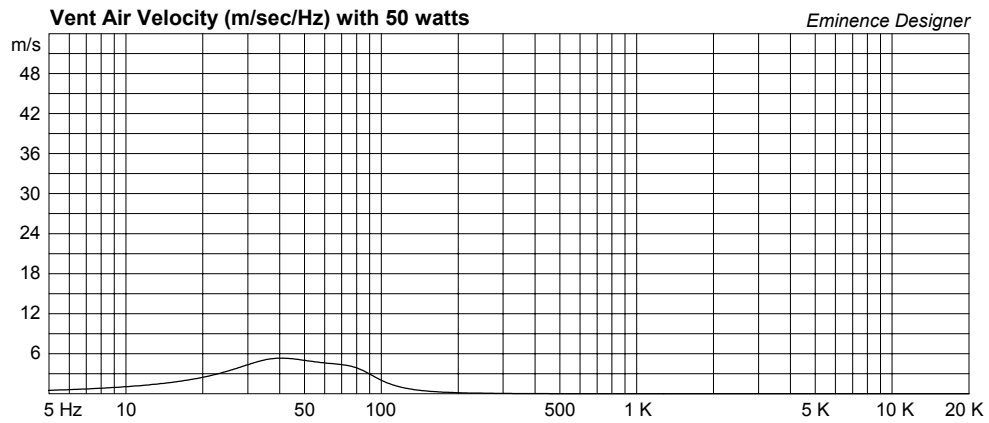
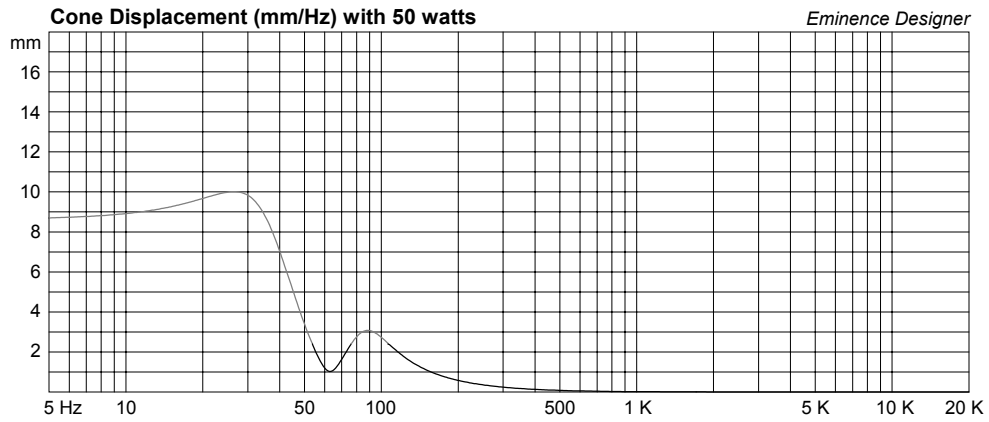
Re = 6.3 ohms

Le = 0.79 mH

Z = 8 ohms

Pe = 150 watts





# Alpha12A Med Vented, High Pwr Sat or Low Pwr FR Use

By Jerry McNutt, Eminence Speaker LLC

High Power Sat: 150 Watt Thermal Limit, use steep High Pass Filter 150 Hz or above.

Low Power Full Range use: 60 Watts Displacement Limit.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2 cu.ft

V(total) = 2.075 cu.ft

Fb = 75 Hz

QL = 7

F3 = 66.36 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 5.774 in

Lv = 0.75 in

## Driver Properties

--Description--

Name: Alpha-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 1.5 inch (38.1 mm) copper.

Magnet: 20 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 49 Hz

Qms = 6.53

Vas = 121.5 liters

Xmax = 2.4 mm

Sd = 519.5 sq.cm

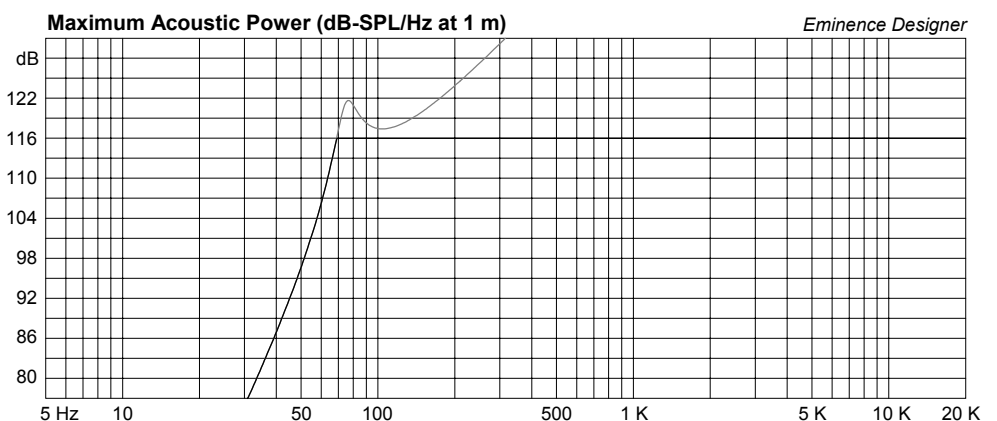
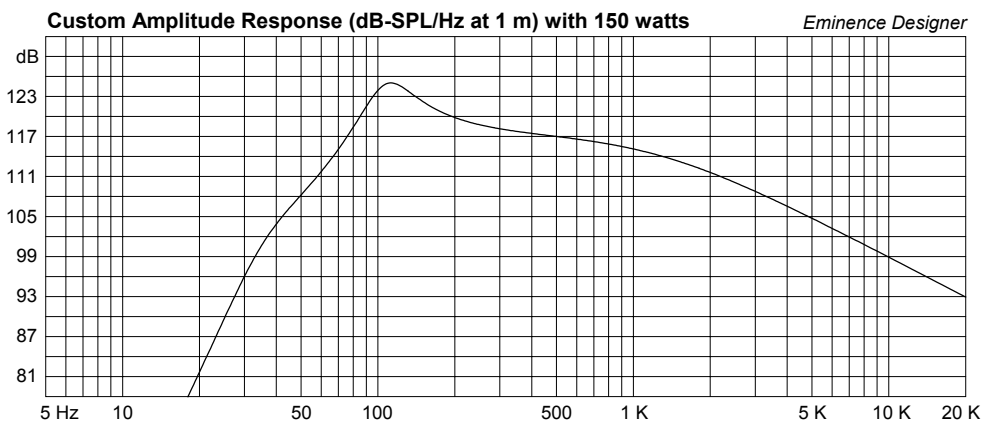
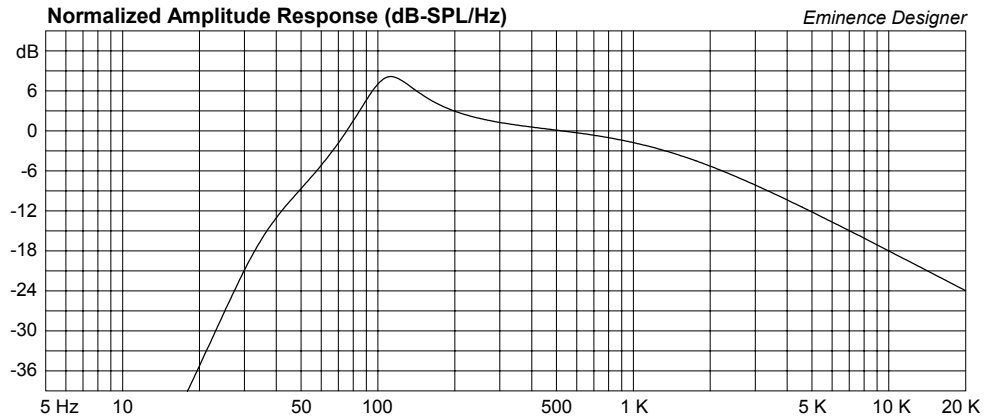
Qes = 0.88

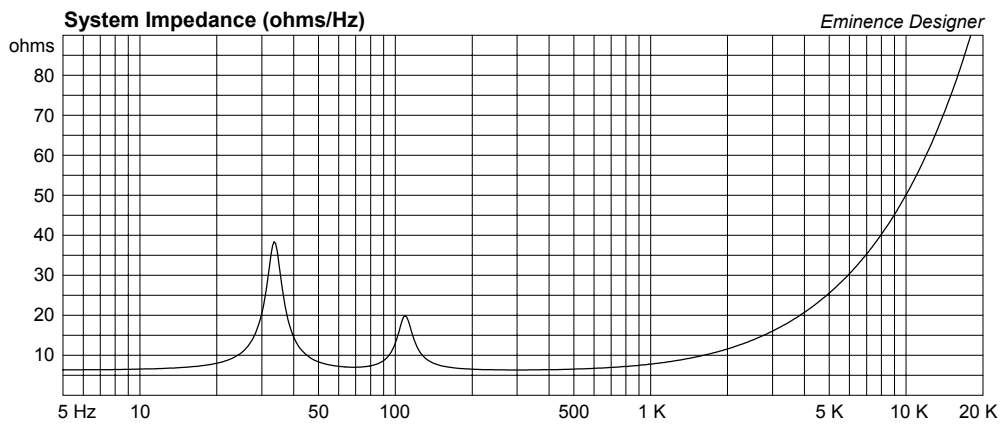
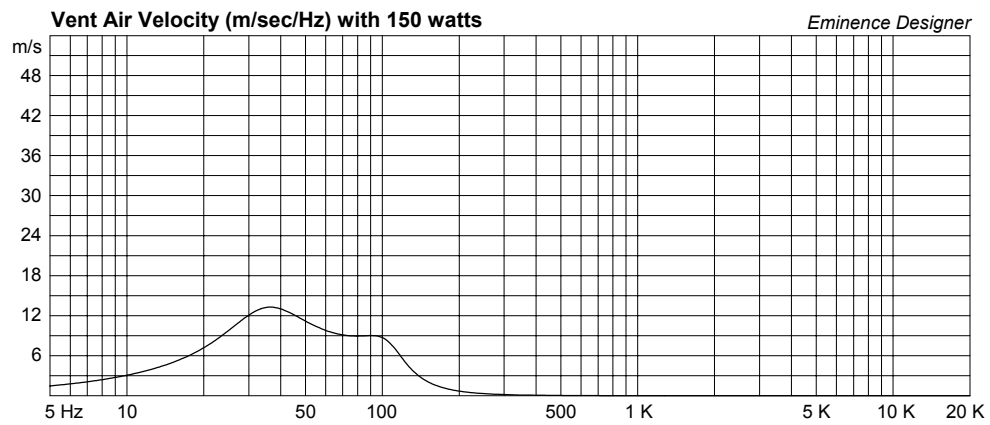
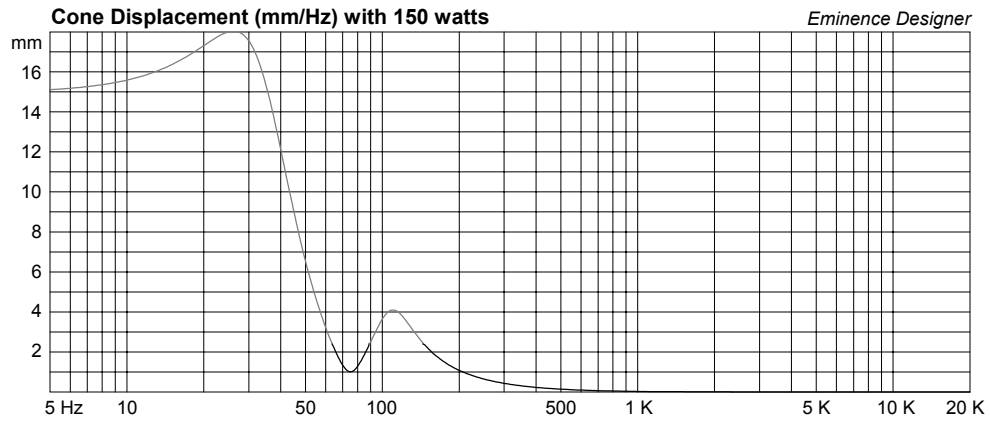
Re = 6.3 ohms

Le = 0.79 mH

Z = 8 ohms

Pe = 150 watts





# Alpha12A Small Sealed Mid/High or Floor Monitor

By Jerry McNutt, Eminence Speaker LLC

150 Watt Thermal Limit; Use with a steep High Pass Filter set to 150 Hz or higher.

## Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 0.496 cu.ft

V(total) = 0.559 cu.ft

Qtc = 1.422

QL = 20

F3 = 100.2 Hz

Fill = heavy

## Driver Properties

--Description--

Name: Alpha-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 1.5 inch (38.1 mm) copper.

Magnet: 20 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 49 Hz

Qms = 6.53

Vas = 121.5 liters

Xmax = 2.4 mm

Sd = 519.5 sq.cm

Qes = 0.88

Re = 6.3 ohms

Le = 0.79 mH

Z = 8 ohms

Pe = 150 watts

