Beta12A-2 Twin Loaded BandPass Sub

By Jerry McNutt, Eminence Speaker LLC
Great Compliment to Beta12A-2 Small Sealed Box for Portable PA System
Displacement Limited to 100 watts.

Box Properties

--Description--
Name:
Type: Bandpass Single-Tuned Box
Shape: Prism, Bandpass with two chambers
--Box Parameters--
Chamber 1 - lower-frequency

Vb =	2.75 cu.ft
V(total) =	2.973 cu.ft
Fb =	94.58 Hz
QL =	7
F3 =	57.38 Hz
Fill =	minimal

Chamber 2 - upper-frequency

Vb =	2.917 cu.ft
V(total) =	2.873 cu.ft
Fb =	90 Hz
QL =	7
F3 =	142.5 Hz
Fill =	minimal

--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush

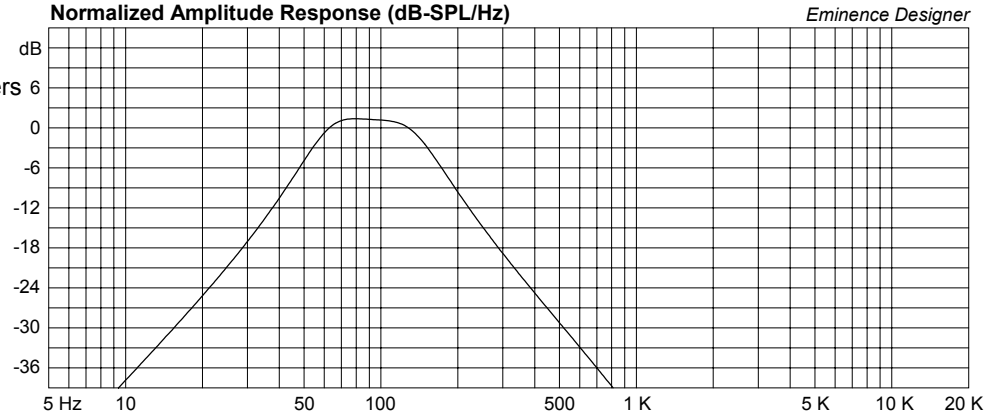
Dv =	12 in
Lv =	1.418 in

Driver Properties

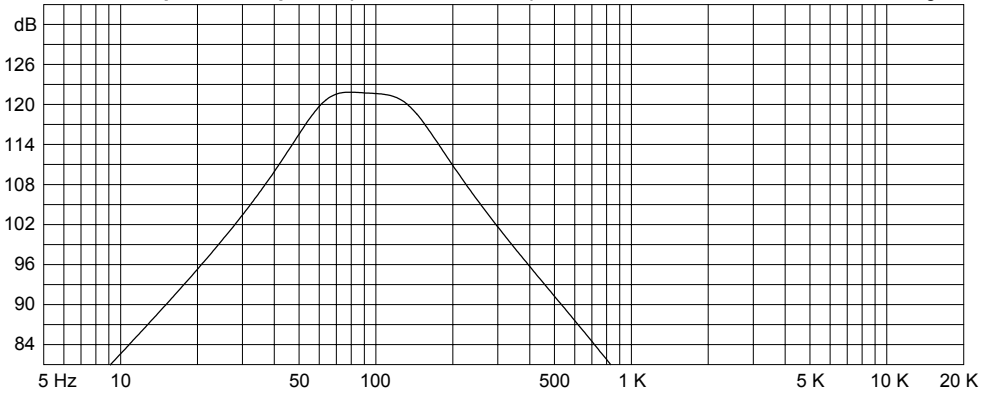
--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 2
Mounting = Standard, Push-pull
Wiring = Parallel
Drivers sum coherently = Yes
--Driver Parameters--

Fs =	46.8 Hz
Qms =	6
Vas =	120.1 liters [240.2]
Xmax =	4.4 mm
Sd =	538.9 sq.cm [1024]
Qes =	0.5
Re =	5 ohms [2.5]
Le =	0.64 mH [0.32]
Z =	8 ohms [4]
Pe =	250 watts [500]

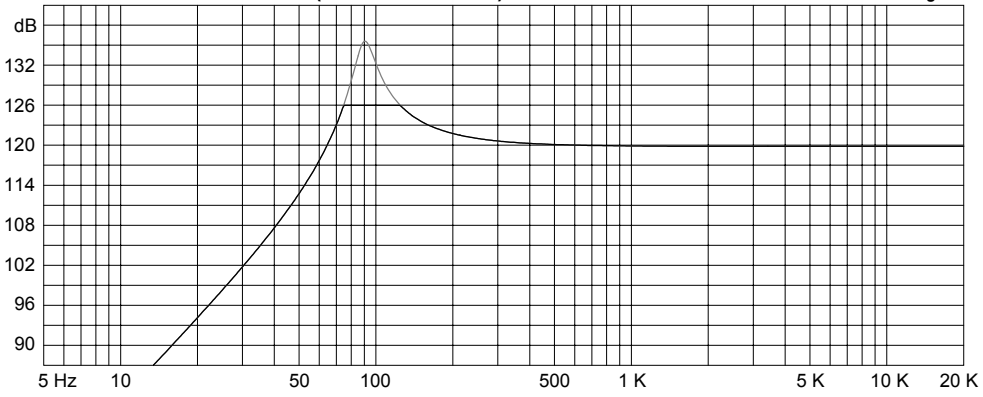
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 100 watts *Eminence Designer*

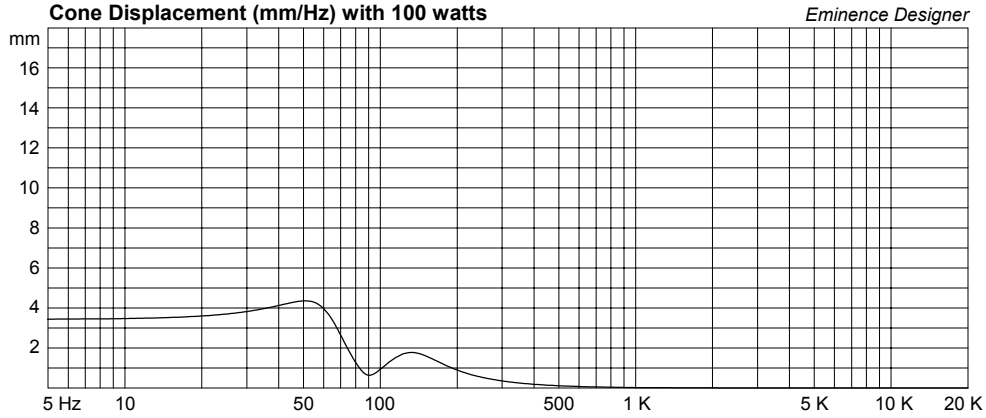


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



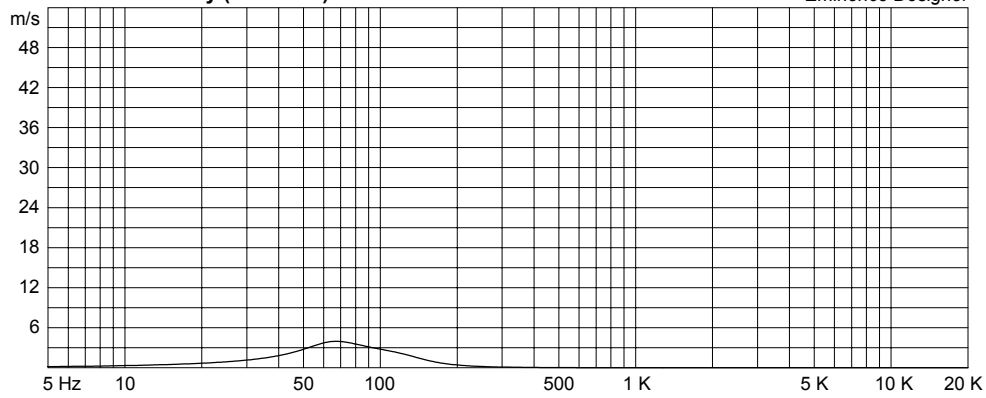
Cone Displacement (mm/Hz) with 100 watts

Eminence Designer



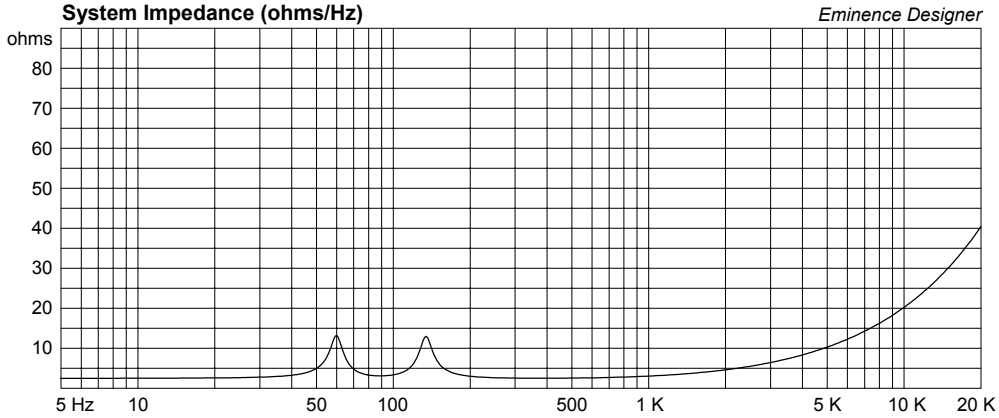
Vent Air Velocity (m/sec/Hz) with 100 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



Beta12A-2 Bass 1x12 Bass Guitar Cabinet

By Jerry McNutt, Eminence Speaker LLC
Great For Bass Guitar. Displacement Limited to 150 Watts.
Small Vented Cabinet.

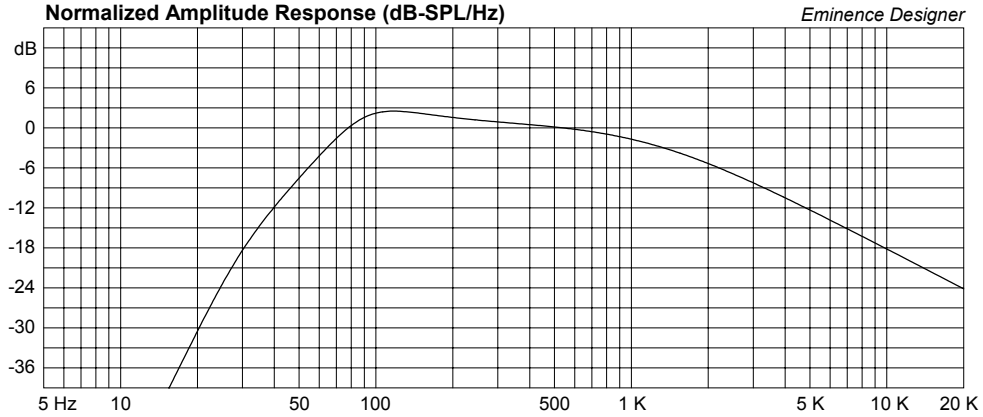
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 1.75 cu.ft
V(total) = 1.894 cu.ft
Fb = 54.15 Hz
QL = 7
F3 = 64.18 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 4.154 in

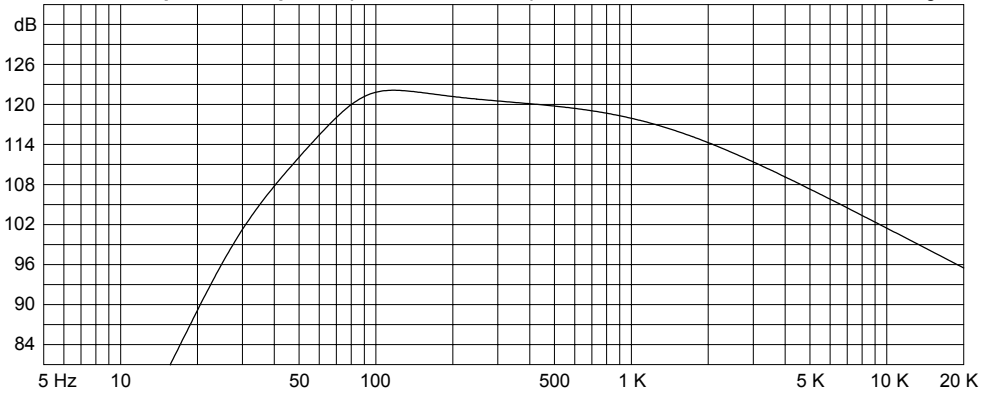
Driver Properties

--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 46.8 Hz
Qms = 6
Vas = 120.1 liters
Xmax = 4.4 mm
Sd = 538.9 sq.cm
Qes = 0.5
Re = 5 ohms
Le = 0.64 mH
Z = 8 ohms
Pe = 250 watts

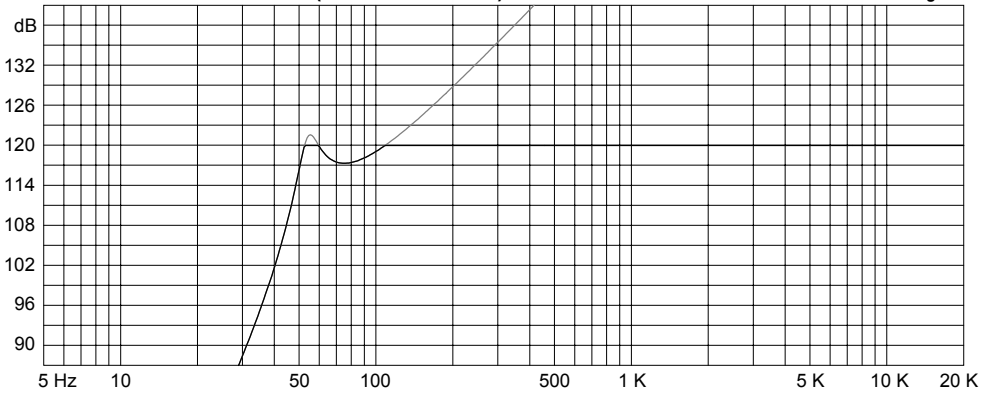
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 150 watts *Eminence Designer*

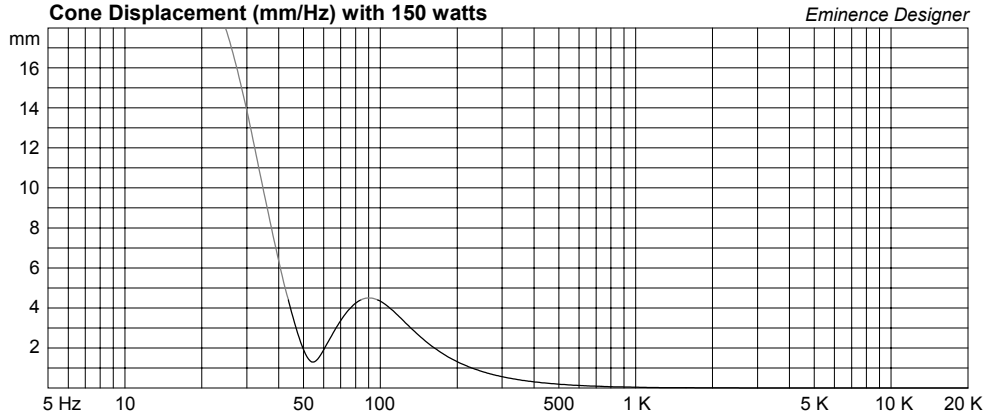


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



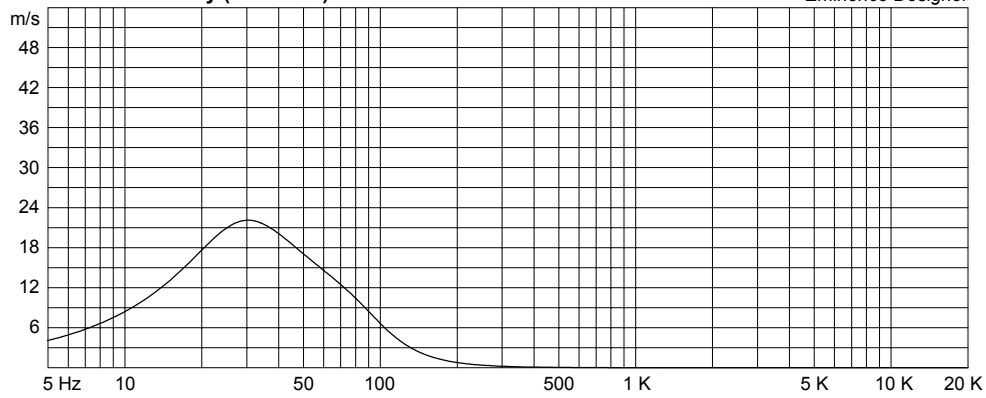
Cone Displacement (mm/Hz) with 150 watts

Eminence Designer



Vent Air Velocity (m/sec/Hz) with 150 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer