



## NSW602 1-6

- 21" Nominal Diameter
- 5000 W Program Power
- 6 Ω
- 21MM XMAX

APPLICATION		ENCLOSURE	
Midrange	<input type="checkbox"/>	Sealed Box	<input type="checkbox"/>
Midbass	<input type="checkbox"/>	Vented Box	<input checked="" type="checkbox"/>
Woofer	<input type="checkbox"/>	Scoop Loading	<input type="checkbox"/>
Subwoofer	<input checked="" type="checkbox"/>	Horn Loading	<input type="checkbox"/>
Bass Guitar	<input type="checkbox"/>		

### SPECIFICATION

Nominal Basket Diameter	21.0", 533 mm
Nominal Impedance*	6 Ω
Power Rating**	
Watts	(AES) 2500 W
Music	5000 W
Peak Power	10000 W
Resonance	29 HZ
Usable Frequency Range	25 Hz – 0.6 kHz
Sensitivity***	97.0 dB
Magnet Weight	45 oz.
Gap Height	0.75", 19 mm
Voice Coil Diameter	6", 152 mm
Mirror Image Twin Spiders	

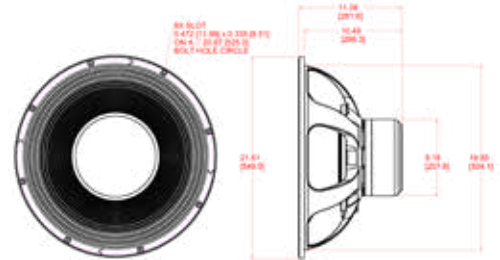
### MATERIALS OF CONSTRUCTION

I/O Copper voice coil • Fiberglass former • Neodymium magnet • Vented Motor • Die-cast aluminum basket • Wet Pressed, X5 Cone Pulp • Advanced Polycotton Surround • Wet Pressed, X5 Dust Cap Pulp • Aluminum demodulation ring



### AMERICAN MUSCLE

Eminence has created arguably the best 21" subwoofer on the market by implementing advanced measurement systems and FEA optimization tools. The result is absurd, unrivaled displacement, and exceptionally high power handling with top of the line performance in small to large vented enclosures.



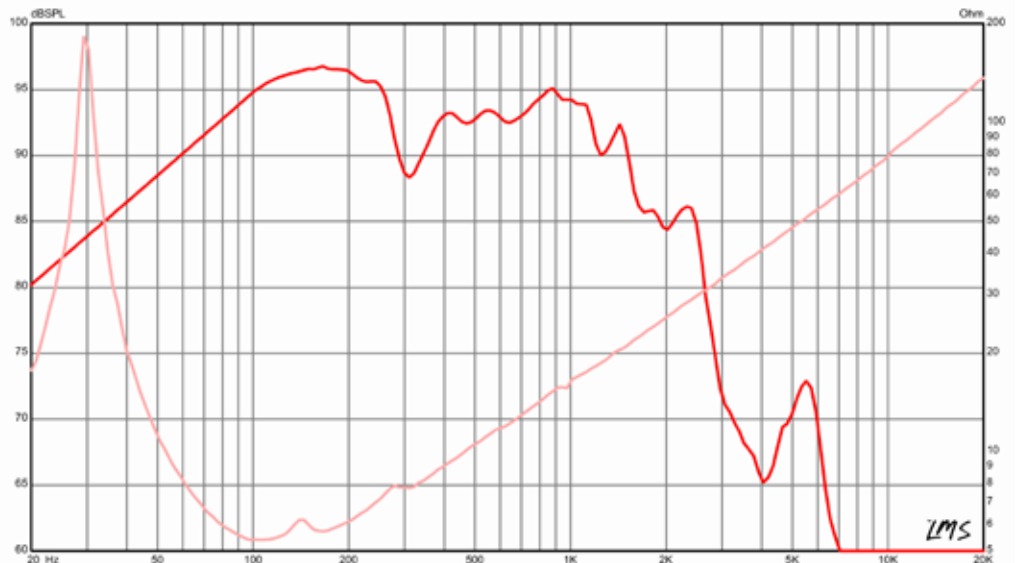
### THIELE & SMALL PARAMETERS

Fs	29 Hz
Re	3.80 Ω
Le	1.38 mH
Qms	15.35
Qes	0.31
Qts	0.31
Vas	7.93 cu.ft., 224.58 liters
Vd	3448.2 cc
Cms	0.06 mm/N
BL	33.79 T-M
Mms	508 grams
EBP	94 mm
Xmax	21 mm
Sd	1642.0 cm <sup>2</sup>
Xlim	40.4 mm

### MOUNTING INFORMATION

Recommended Enclosure Volume	
Sealed	N/A liters
	N/A cu.ft.
Vented	155.74–481.39 liters
	5.50–17.00 cu.ft.
Driver Volume Displaced	0.379 cu.ft., 10.72 liters
Overall Diameter	21.65", 549.9 mm
Baffle Hole Diameter	19.83", 503.7 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	N/A
Mounting Holes Diameter	0.34", 8.6 mm
Mounting Holes B.C.D.	20.67", 525.0 mm
Depth	10.39", 263.9 mm
Net Weight	48.10 lbs, 21.82 kg

### FREQUENCY RESPONSE & IMPEDANCE CURVE\*



# NSW6021-6 Small Size Sub

By Matt Marcum, Eminence Speaker LLC

Thermally limited to 2500W; F3 of 35Hz. Use steep high pass filter set to 27Hz

Place ports symmetrically about woofer to reduce chance of cone rock.



## Box Properties

--Description--

Name: Vented Box 1

Type: Vented Box

Shape: Prism, square

Company: Eminence Speaker LLC

--Box Parameters--

Vb = 6.551 cu.ft

V(total) = 7.721 cu.ft

Fb = 38.16 Hz

QL = 6.36

F3 = 35.07 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 18 in

Wv = 2 in

Lv = 16.5 in

## Driver Properties

--Description--

Name: NSW6021-6

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 29.35 Hz

Qms = 15.35

Vas = 224.6 liters

Cms = 0.06 mm/N

Mms = 507.5 g

Rms = 5.888 kg/s

Xmax = 21.01 mm

Xmech = 50 mm

P-Dia = 454.6 mm

Sd = 1642 sq.cm

P-Vd = 3.411 liters

--Electrical Parameters--

Qes = 0.31

Re = 3.8 ohms

Le = 1.35 mH

Z = 6 ohms

BL = 33.79 Tm

Pe = 2500 watts

--Electromech. Parameters--

Qts = 0.31

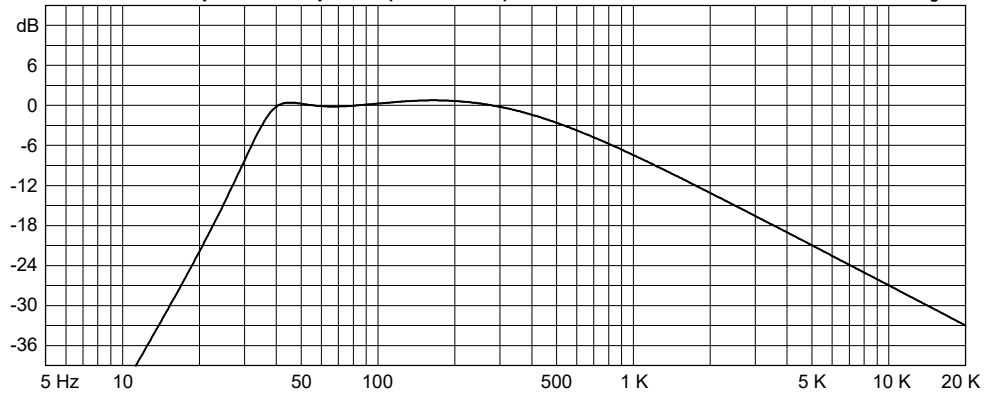
no = 1.766 %

1-W SPL = 94.62 dB

2.83-V SPL = 97.85 dB

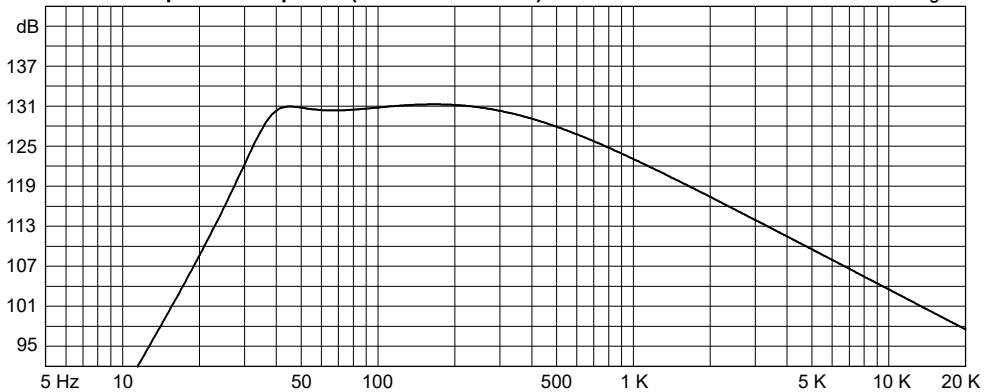
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



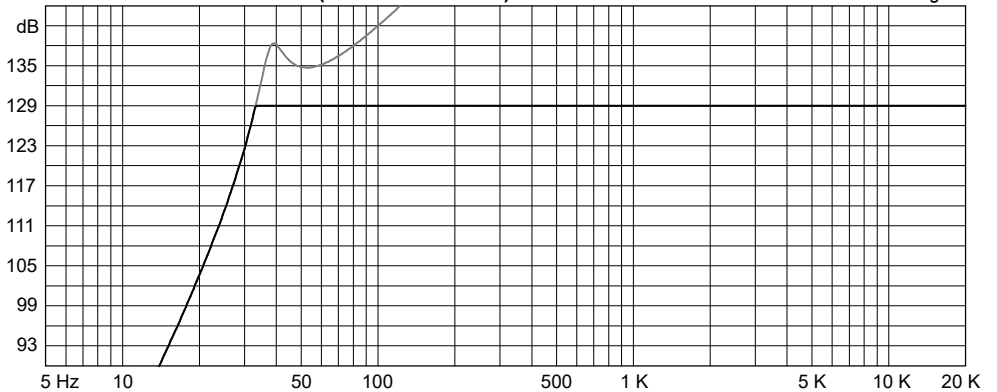
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 2500 watts

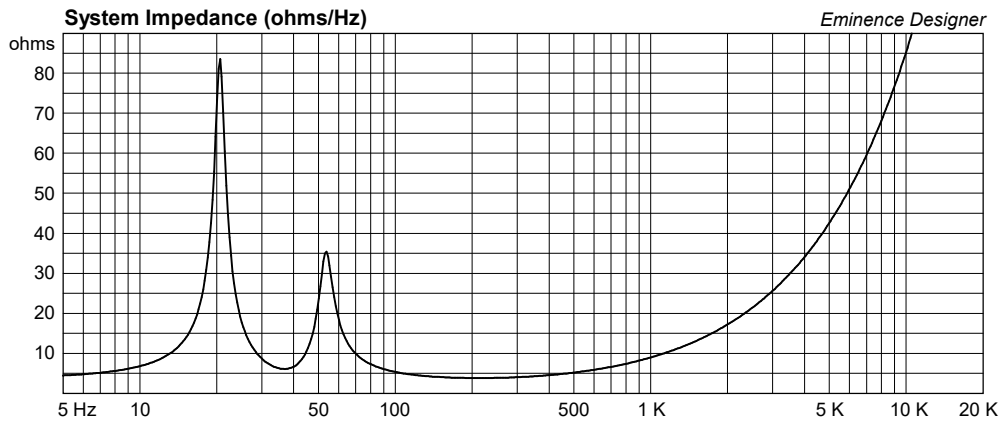
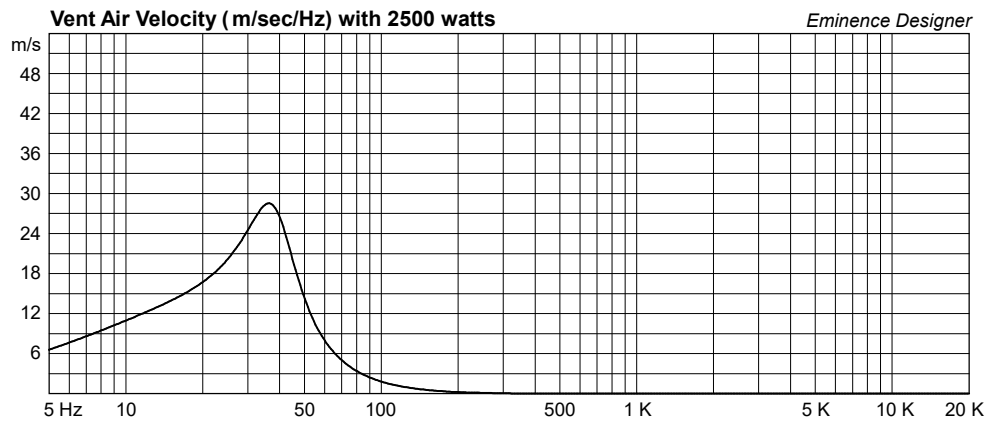
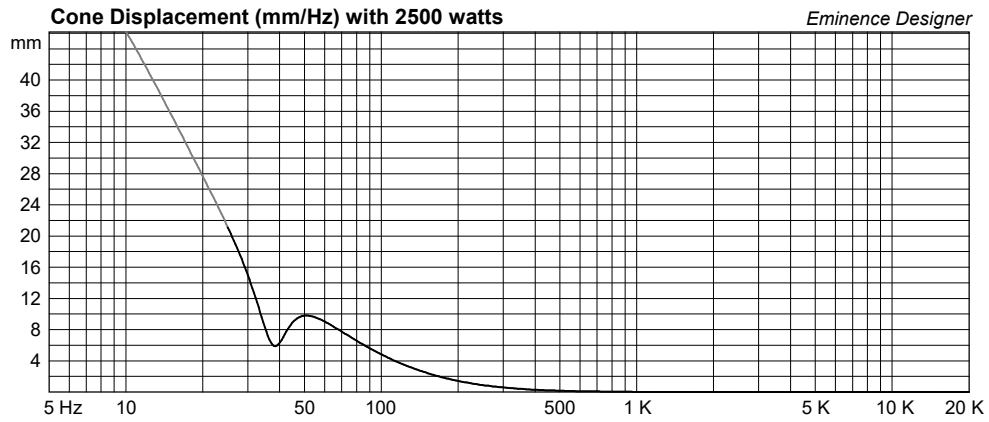
Eminence Designer



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

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# NSW6021-6 Medium Size Sub

By Matt Marcum, Eminence Speaker LLC

Thermally limited to 2500W; F3 of 30Hz. Use steep high pass filter set to 25Hz

Place ports symmetrically about the woofer to reduce chance of cone rock.



## Box Properties

--Description--

Name: Vented Box 2

Type: Vented Box

Shape: Prism, square

Company: Eminence Speaker LLC

--Box Parameters--

Vb = 8.477 cu.ft

V(total) = 9.914 cu.ft

Fb = 31.26 Hz

QL = 6.36

F3 = 30.21 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 19 in

Wv = 2 in

Lv = 21 in

## Driver Properties

--Description--

Name: NSW6021-6

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 29.35 Hz

Qms = 15.35

Vas = 224.6 liters

Cms = 0.06 mm/N

Mms = 507.5 g

Rms = 5.888 kg/s

Xmax = 21.01 mm

Xmech = 50 mm

P-Dia = 454.6 mm

Sd = 1642 sq.cm

P-Vd = 3.411 liters

--Electrical Parameters--

Qes = 0.31

Re = 3.8 ohms

Le = 1.35 mH

Z = 6 ohms

BL = 33.79 Tm

Pe = 2500 watts

--Electromech. Parameters--

Qts = 0.31

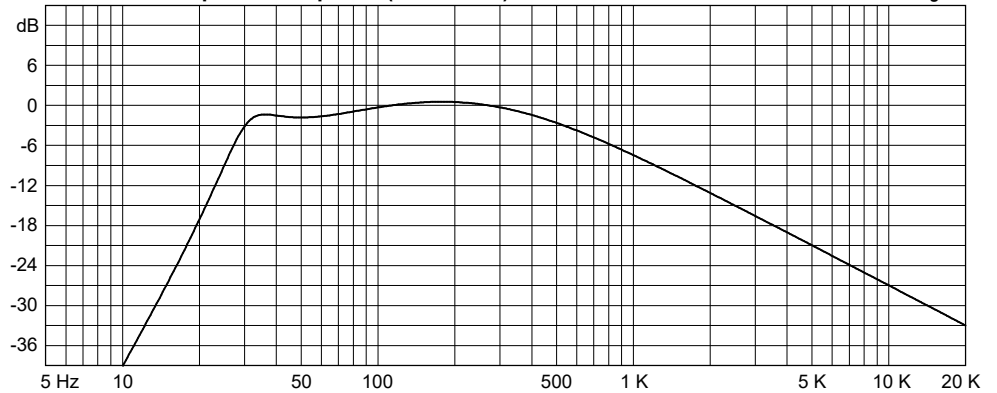
no = 1.766 %

1-W SPL = 94.62 dB

2.83-V SPL = 97.85 dB

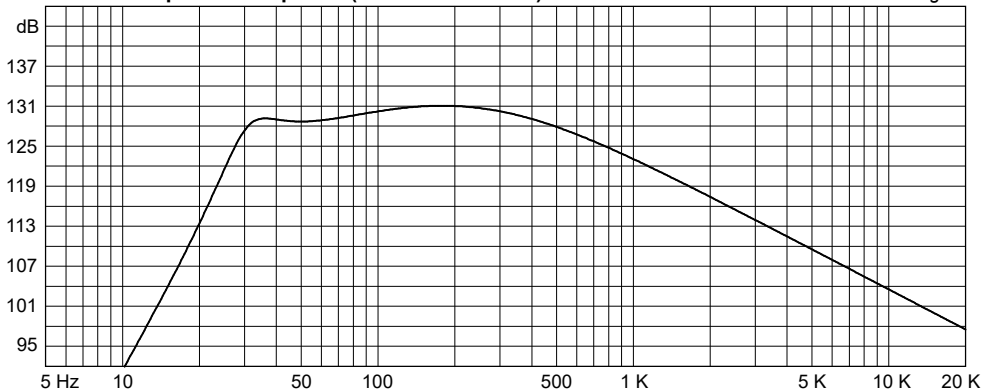
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



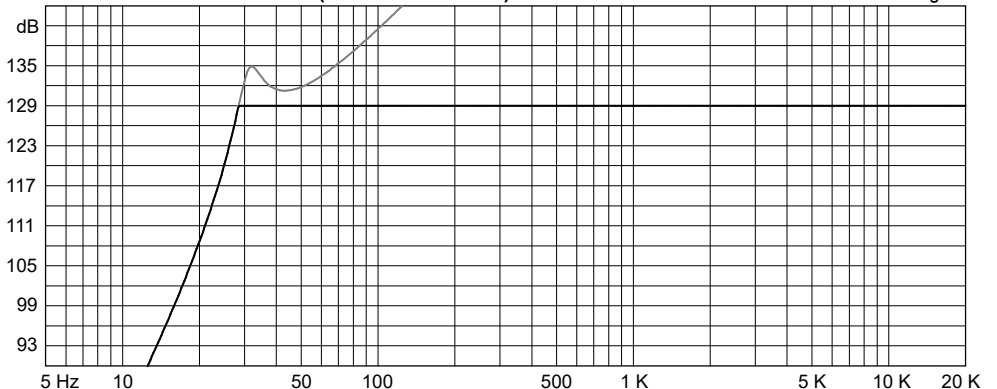
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 2500 watts

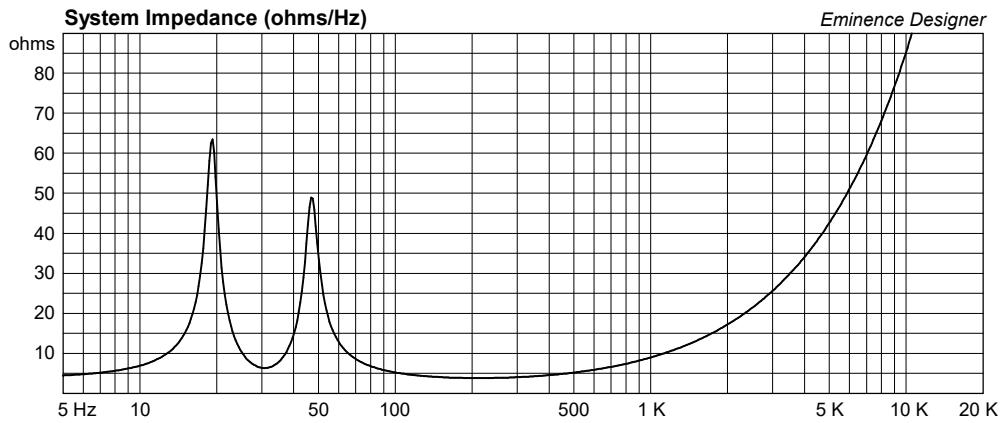
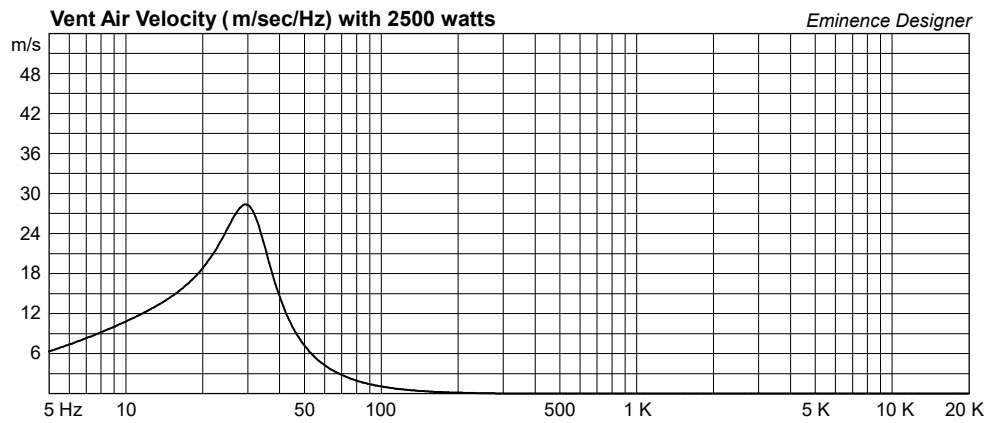
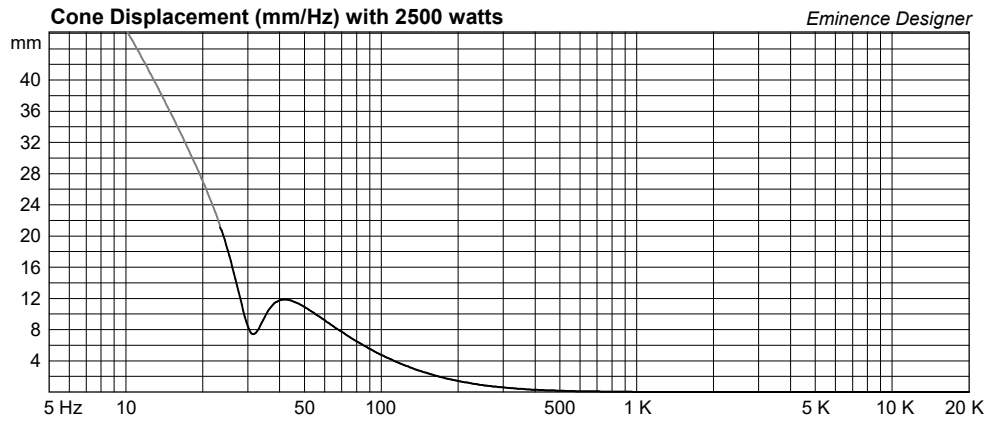
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Maximum Acoustic Power (dB-SPL/Hz at 1 m)

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# NSW6021-6 Large Size Sub

By Matt Marcum, Eminence Speaker LLC  
Thermally limited to 2500W; F3 of 25Hz. Use steep high pass filter set to 21Hz  
Place ports symmetrically about the woofer to reduce chance of cone rock



## Box Properties

--Description--

Name: Vented Box 3  
Type: Vented Box  
Shape: Prism, square  
Company: Eminence Speaker LLC

--Box Parameters--

Vb = 13.13 cu.ft  
V(total) = 14.98 cu.ft  
Fb = 25.52 Hz  
QL = 6.36  
F3 = 25.47 Hz  
Fill = minimal

--Vents--

No. of Vents = 4  
Vent shape = round  
Vent ends = one flush  
Dv = 5.709 in  
Lv = 25.5 in

## Driver Properties

--Description--

Name: NSW6021-6  
Type: Standard one-way driver  
Company: Eminence Speaker LLC

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 29.35 Hz  
Qms = 15.35  
Vas = 224.6 liters  
Cms = 0.06 mm/N  
Mms = 507.5 g  
Rms = 5.888 kg/s  
Xmax = 21.01 mm  
Xmech = 50 mm  
P-Dia = 454.6 mm  
Sd = 1642 sq.cm  
P-Vd = 3.411 liters

--Electrical Parameters--

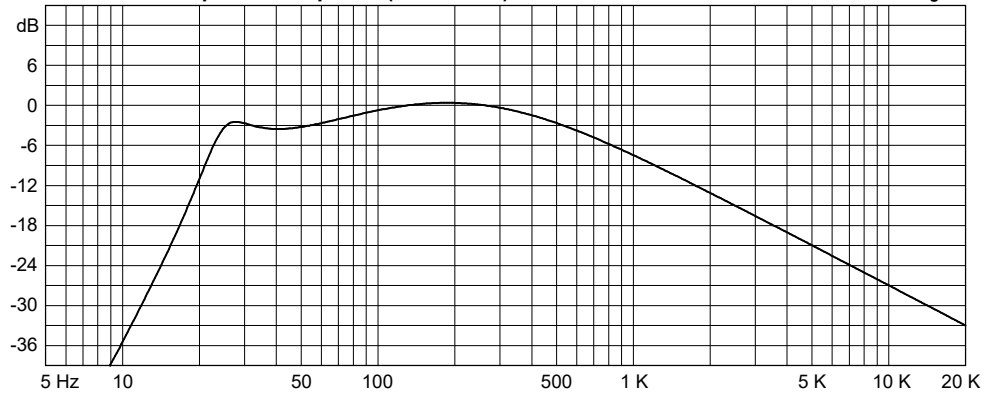
Qes = 0.31  
Re = 3.8 ohms  
Le = 1.35 mH  
Z = 6 ohms  
BL = 33.79 Tm  
Pe = 2500 watts

--Electromech. Parameters--

Qts = 0.31  
no = 1.766 %  
1-W SPL = 94.62 dB  
2.83-V SPL = 97.85 dB

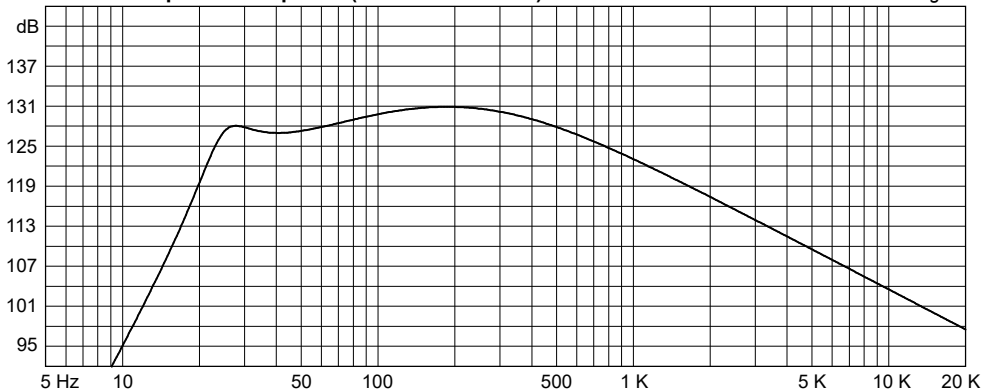
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



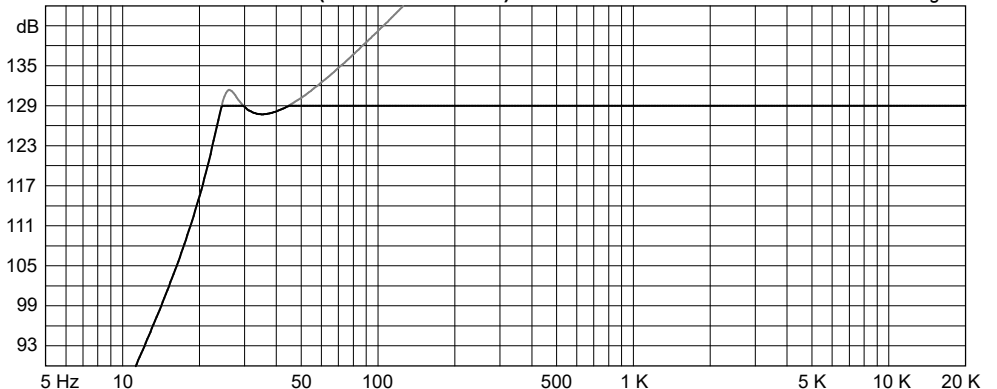
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 2500 watts

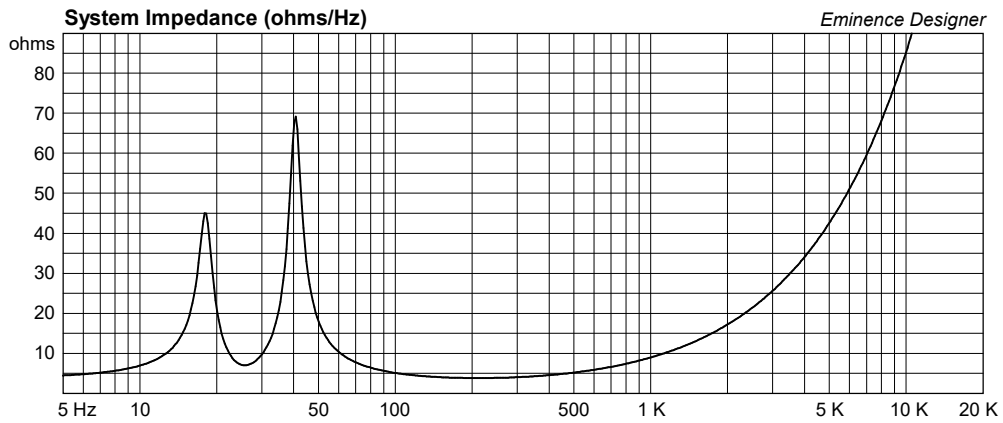
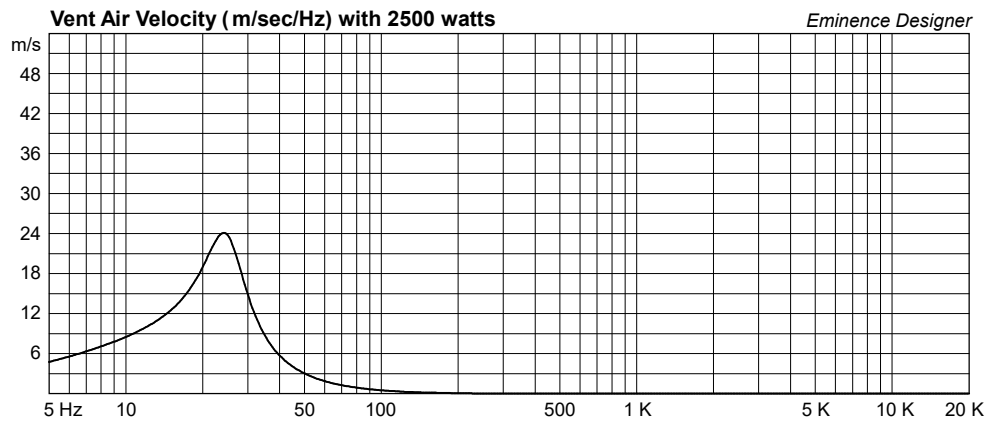
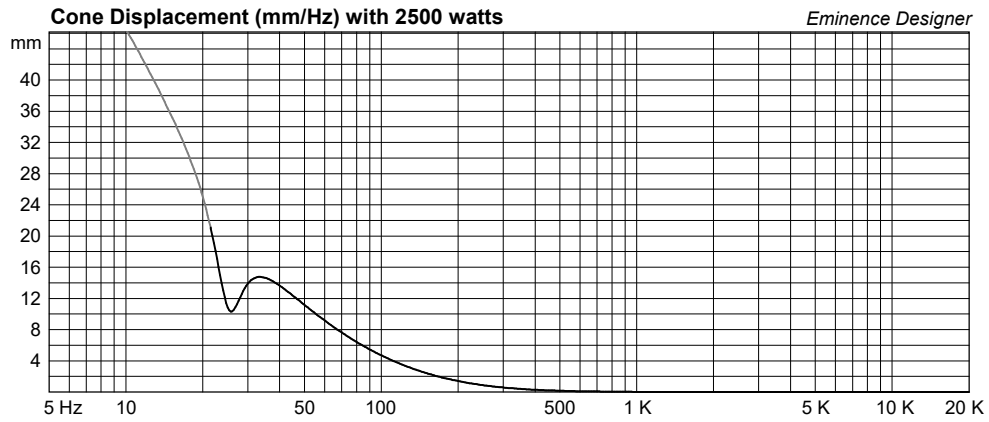
Eminence Designer



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

Eminence Designer





# NSW6021-6 Dual 21" Sub

By Matt Marcum, Eminence Speaker LLC  
Thermally limited to 5000W; F3 of 29Hz. Use steep high pass filter set to 24Hz  
Place ports symmetrically about woofers to reduce chance of cone rock



## Box Properties

--Description--

Name: Vented Box 4  
Type: Vented Box  
Shape: Prism, square  
Company: Eminence Speaker LLC

--Box Parameters--

Vb = 21.27 cu.ft  
V(total) = 24.53 cu.ft  
Fb = 29.22 Hz  
QL = 5.578  
F3 = 28.56 Hz  
Fill = minimal

--Vents--

No. of Vents = 8  
Vent shape = round  
Vent ends = one flush  
Dv = 5.709 in  
Lv = 22 in

## Driver Properties

--Description--

Name: NSW6021-6  
Type: Standard one-way driver  
Company: Eminence Speaker LLC

--Configuration--

**No. of Drivers = 2**

Mounting = Standard  
Wiring = Parallel  
Drivers sum coherently = Yes

--Mechanical Parameters--

Fs = 29.35 Hz  
Qms = 15.35  
Vas = 224.6 liters 449.2  
Cms = 0.06 mm/N 0.03  
Mms = 507.5 g 1015  
Rms = 5.888 kg/s 11.78  
Xmax = 21.01 mm  
Xmech = 50 mm  
P-Dia = 454.6 mm 642.9  
Sd = 1642 sq.cm 3284  
P-Vd = 3.411 liters 6.822

--Electrical Parameters--

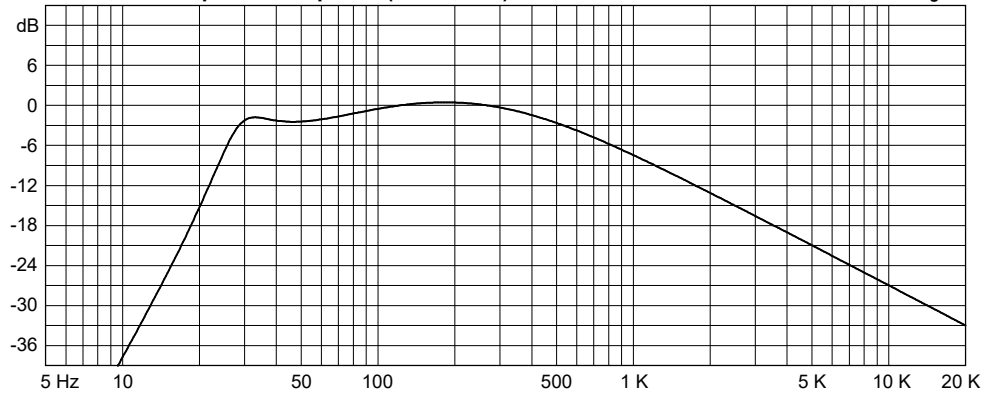
Qes = 0.31  
Re = 3.8 ohms 1.9  
Le = 1.35 mH 0.675  
Z = 6 ohms 3  
BL = 33.79 Tm 33.87  
Pe = 2500 watts 5000

--Electromech. Parameters--

Qts = 0.31  
no = 1.766 % 3.532  
1-W SPL = 94.62 dB 97.63  
2.83-V SPL = 97.85 dB 103.9

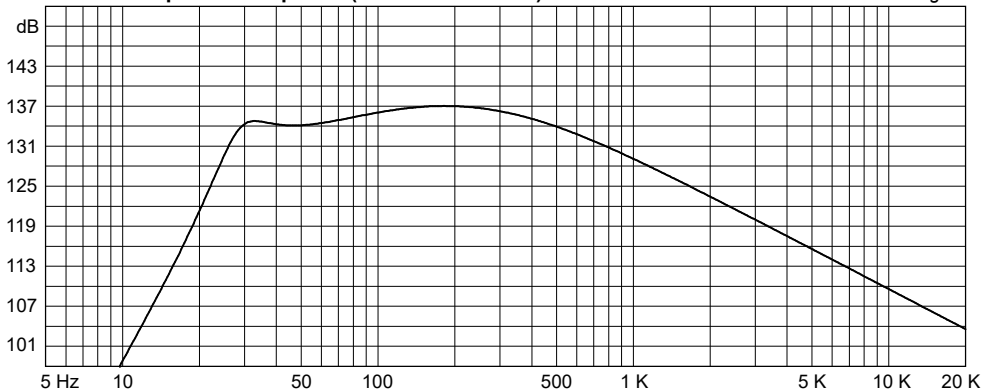
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 5000 watts

Eminence Designer



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

Eminence Designer

