

### SPECIFICATIONS

Nominal Diameter		12''- 320 mm
Rated Impedance		2+2 Ohm
Nominal Power Handling 1		350 W
Program Power <sup>2</sup>		800 W
Sensitivity <sup>3</sup>		95 dB
Frequency Range <sup>4</sup>		35-2000 Hz
Minimum Impedance		-
Basket Material		Diecast Aluminum
Magnet Material		Ferrite
Cone Material		Treated Cellulose
Cone Shape		Planar
Surround		Rubber - Half Roll
Suspension		Nomex Fabric
Voice Coil Diameter		3 in - 75 mm
Voice Coil Winding Material		Copper
Voice Coil Length		20 mm - 0,79 in
Voice Coil Former Material		Glass fiber
Connection type		Faston
Ferrofluid		No
Magnetic Gap Height		10 mm - 0,39 in
Max. Peak to Peak Excursion		-
Efficiency Bandwidth Product EBP		74
Recommended Loading		Vented Box
Volume / Tuning frequency		60 Lt (dm <sup>3</sup> ) - 2,119 cuft / 39 Hz
Maximum recommended frequency		-
Version - Part Code	2+2 Ohm	HSB322-22
	4+4 Ohm	HSB322-44

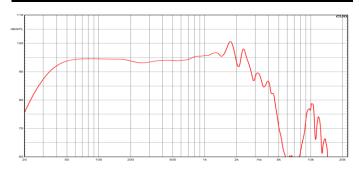
T/S PARAMETERS			2+2 Ohm	
* Parameters measured with voice coils connected in series				
Resonance frequency	Fs	35 Hz		
DC Resistance	Re	3 Ohm		
Mechanical Q Factor	Qms	3,95		
Electrical Q Factor	Qes	0,47		
Total Q Factor	Qts	0,42		
BI Factor	BI	12 Tm		
Effective Moving Mass	Mms	95 g		
Equivalent Cas air loaded	Vas	83 lt (dm³) - 2,93 cuft		
Suspension Compliance	Cms	-		
Effective Piston Diameter	D	255 mm - 10,04 in		
Effective piston area	Sd	511 cm <sup>2</sup> - 79,21 sq in		
Max. Linear Excursion <sup>₅</sup>	Xmax	7,5 mm - 0,3 in		
Voice Coil Inductance @ 1kHz	Le	0,7 mH		
Half-space Efficency	ŋ0	0,73 %		

# 12" Ceramic Subwoofer

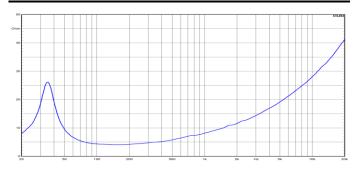
Program Power
Rated impedance
Nominal diameter
Sensitivity (2,83V/1m)
Voice coil diameter
Frequency Range

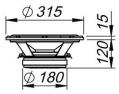
800 W
2+2 Ohm
12''- 320 mm
95 dB
3 in - 75 mm
35-2000 Hz

# FREQUENCY RESPONSE CURVE <sup>6</sup>



## FREE AIR IMPEDANCE CURVE 7





#### MOUNTING AND SHIPPING INFORMATION

Overall Diameter	315 mm - 12,4 in
Baffle Cutout Diameter	282 mm - 11,1 in
Flange and Gasket Thickness	14,5 mm - 0,57 in
Total Depth	134,5 mm - 5,3 in
Bolt Circle Diameter	295 mm - 11,61 in
Bolt Holes Quantity and Diameter	8 / 7 mm - 0,28 in
Net Weight	7,05 Kg - 15,53 lb
Shipping Units	1 Pc

#### NOTES

<sup>1</sup> Norminal power is determined according to AES2-1984 (r2003) standard.
<sup>2</sup> Program Power is defined as 3 dB greater than the Nominal rating.
<sup>3</sup> Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m, when connected to 2,83V sine wave test signal.
<sup>4</sup> Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.
<sup>6</sup> Incert Math. Xmax is calculated as (Hvc-Hg)/2 + Hg/4 where Hvc is the coil depth and Hg is the gapdepth.
<sup>6</sup> Frequency response curve In the range above 150 Hz is measured on infinite baffle conditions and simulated as per recommended loading in the range below 150 Hz.
<sup>7</sup> Impedance curve is measured in free air conditions at small signals.