



## 6,5" Ceramic Woofer

Program Power	160 W
Rated impedance	4 Ohm
Nominal diameter	6,5" - 165 mm
Sensitivity (2,83V/1m)	93 dB
Voice coil diameter	1,25 in - 32 mm
Frequency Range	45-5000 Hz

### SPECIFICATIONS

Nominal Diameter	6,5" - 165 mm	
Rated Impedance	4 Ohm	
Nominal Power Handling <sup>1</sup>	80 W	
Program Power <sup>2</sup>	160 W	
Sensitivity <sup>3</sup>	93 dB	
Frequency Range <sup>4</sup>	45-5000 Hz	
Minimum Impedance	-	
Basket Material	Aluminum	
Magnet Material	Ferrite	
Cone Material	Doped cellulose fiber	
Cone Shape	Exponential	
Surround	Rubber	
Suspension	Cotton fabric	
Voice Coil Diameter	1,25 in - 32 mm	
Voice Coil Winding Material	Copper	
Voice Coil Length	12 mm - 0,47 in	
Voice Coil Former Material	Kapton	
Connection type	-	
Ferrofluid	No	
Magnetic Gap Height	6 mm - 0,24 in	
Max. Peak to Peak Excursion	-	
Efficiency Bandwidth Product EBP	121	
Recommended Loading	Vented Box	
Volume / Tuning frequency	19 Lt (dm <sup>3</sup> ) - 0,671 cuft / 46 Hz	
Maximum recommended frequency	-	
Version - Part Code	8 Ohm	HWB160
	4 Ohm	HWB160-4

### T/S PARAMETERS

4 Ohm

Resonance frequency	Fs	46 Hz
DC Resistance	Re	3,3 Ohm
Mechanical Q Factor	Qms	7,7
Electrical Q Factor	Qes	0,38
Total Q Factor	Qts	0,36
BI Factor	Bl	6,5 Tm
Effective Moving Mass	Mms	13,9 g
Equivalent Gas air loaded	Vas	19,5 lt (dm <sup>3</sup> ) - 0,69 cuft
Suspension Compliance	Cms	-
Effective Piston Diameter	D	134 mm - 5,28 in
Effective piston area	Sd	141 cm <sup>2</sup> - 21,86 sq in
Max. Linear Excursion <sup>5</sup>	Xmax	4,5 mm - 0,18 in
Voice Coil Inductance @ 1kHz	Le	0,9 mH
Half-space Efficiency	$\eta_0$	0,5 %

### NOTES

<sup>1</sup> Nominal 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.

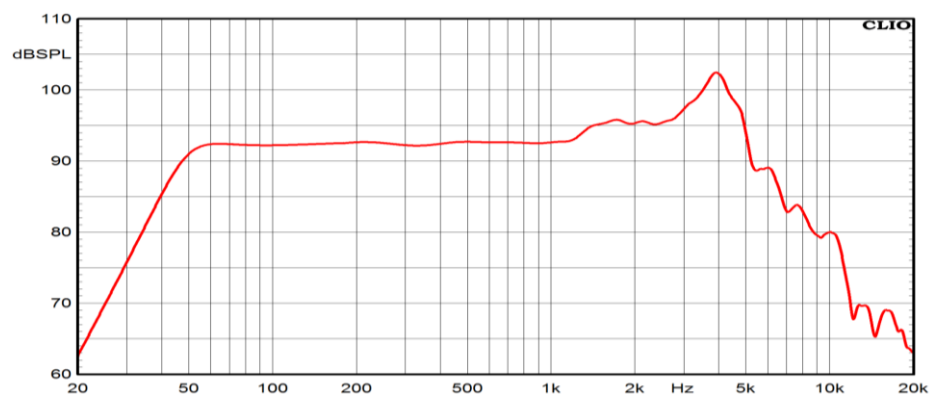
<sup>4</sup> Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.

<sup>5</sup> Linear Math. Xmax is calculated as  $(Hvc-Hg)/2 + Hg/4$  where Hvc is the coil depth and Hg is the gapdepth.

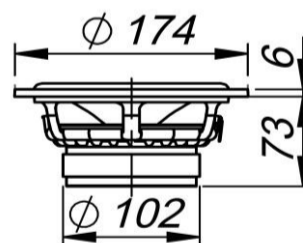
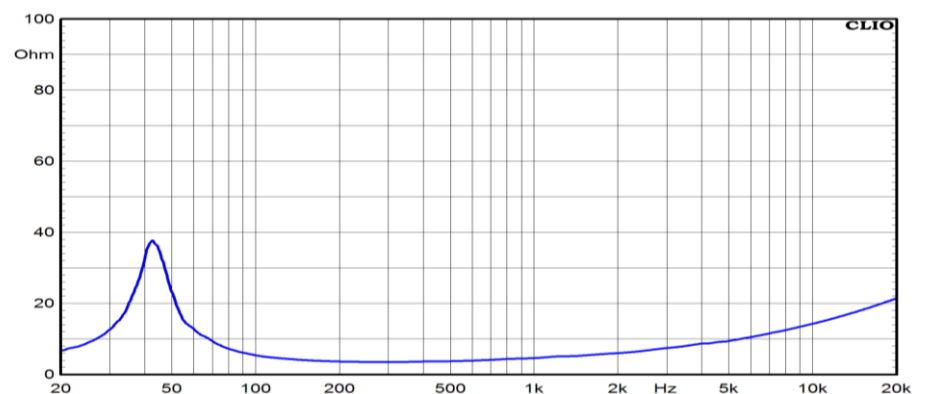
<sup>6</sup> Frequency response curve in the range above 150 Hz is measured on infinite baffle conditions and simulated as per recommended loading in the range below 150 Hz.

<sup>7</sup> Impedance curve is measured in free air conditions at small signals.

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



### FREE AIR IMPEDANCE CURVE <sup>7</sup>



### MOUNTING AND SHIPPING INFORMATION

Overall Diameter	174 mm - 6,85 in
Baffle Cutout Diameter	146 mm - 5,75 in
Flange and Gasket Thickness	6 mm - 0,24 in
Total Depth	79 mm - 3,11 in
Bolt Circle Diameter	164 mm - 6,46 in
Bolt Holes Quantity and Diameter	6 / 4,5 mm - 0,18 in
Net Weight	1,6 Kg - 3,52 lb
Shipping Units	4 Pcs