



# 6,5" Ceramic Woofer

**Program Power** 160 W Rated impedance 4 Ohm

6,5"- 165 mm Nominal diameter

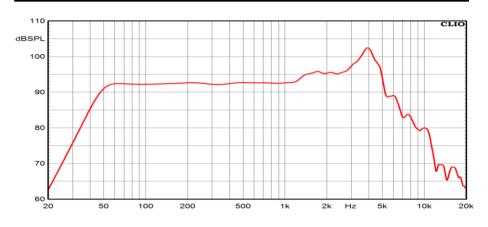
Sensitivity (2,83V/1m) 93 dB

Voice coil diameter 1,25 in - 32 mm 45-5000 Hz Frequency Range

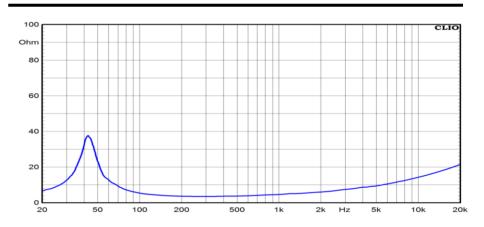
#### **SPECIFICATIONS**

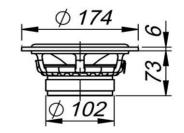
Nominal Diameter		6,5''- 165 mm
Rated Impedance		4 Ohm
Nominal Power Handling <sup>1</sup>		80 W
Program Power <sup>2</sup>		160 W
Sensitivity <sup>3</sup>		93 dB
Frequency Range <sup>4</sup>		45-5000 Hz
Minimum Impedance		-
Gasket Material		Aluminum
Magnet Material		Ferrite
Cone Material		Doped cellulose 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 Xvar		-
Efficiency Bandwidth Product EBP		121
Recommended Loading		Vented Box
Volume / Tuning frequency		19 Lt (dm³) - 0,671 cuft / 46 Hz
Maximum recommended frequency		-
Version - Part Code	8 Ohm	HWB160
	4 Ohm	HWB160-4

## FREQUENCY RESPONSE CURVE 6



### FREE AIR IMPEDANCE CURVE 7





#### 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
Bl Factor	BI	6,5 Tm
Effective Moving Mass	Mms	13,9 g
Equivalent Cas air loaded	Vas	19,5 lt (dm³) - 0,69 cuft
Suspension Compliance	Cms	-
Effective Piston Diameter	D	134 mm - 5,28 in
Effective piston area	Sd	141 cm² - 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 Efficency	ŋ0	0,5 %

# 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

# **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.
- 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.
  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.
- $^{5}$  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.