

This Oaktron woofer was engineered for high quality two-way systems. Its robust die cast aluminum basket is supporting a carbon filled polypropylene cone with a molded NBR half-roll surround. The voice coil uses light weight copper clad aluminum wire wound on a polyimide form.

- Woofer
- 6.5" (165 mm) basket diameter
- 50 watts, 8 ohms, 86 dB SPL
- 1.5" aluminum voice coil, aluminum former
- Ferrite magnet, cast aluminum basket
- Polypropylene cone, molded rubber surround

MISCO engineers test and analyze the performance of these speakers using the world's most sophisticated loudspeaker measurement systems including the Klippel Analyzer and the Klippel QC, which are used to validate final design.

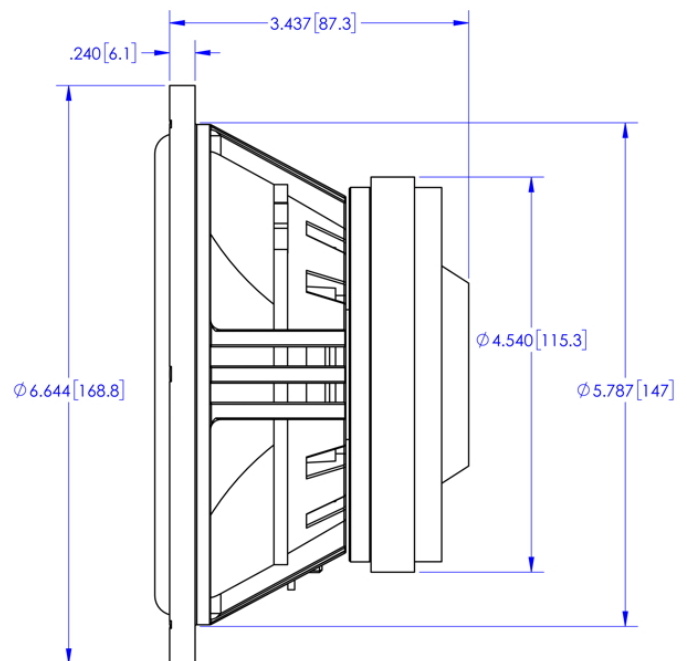
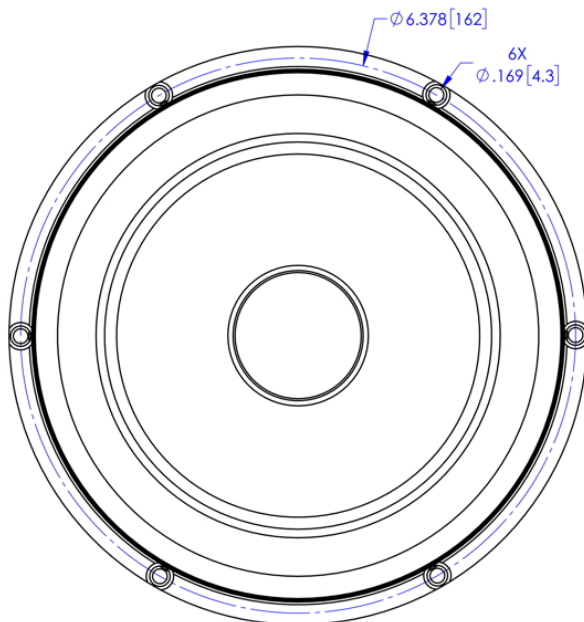
Oaktron by MISCO is the premium line of high performance, ready-to-ship transducers for a wide variety of applications including high fidelity, musical instrument, automotive and many more. From elegantly simple to highly specialized designs for unique and demanding applications, there is an Oaktron loudspeaker perfectly suited for your needs.

Pair this woofer with one of our [MISCO Amplifiers](#).



Primary Specifications

Size, Nominal (inch & mm)	6"
Rated Impedance (Ω)	8
Continuous Power (W)	50
Sensitivity (dB SPL) ¹	86
Frequency Range (Hz)	70 - 7,500
Resonant Frequency (Fs) (Hz)	41



More Specifications

Application	High-End Audio and Home Theater
RoHS Compliant	No
DC Resistance (Re) (Ω)	6.6
Program Power (W)	100
Continuous Power (W)	50

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.6
Voice Coil Inductance (Le) (mH)	0.59
Resonant Frequency (Fs) (Hz)	41
Mechanical Q Factor (Qms)	3.21
Electrical Q Factor (Qes)	0.64
Total Q Factor (Qts)	0.54
Moving Mass (Mms) (gm)	19.3
Suspension Compliance (Cms) (mm/N)	0.77
Mechanical Resistance (Rms) (kg/s)	1.56
Surface Area of Diaphragm (Sd) (cm²)	130.7
Compliance Equivalent Volume (Vas) (L)	18.56
Maximum Linear Excursion (Xmax) (mm)	4.4
Coil Winding Height (mm)	15.2
Magnetic Gap Height (mm)	6.4
Motor Force Factor (BL) (T•M)	7.2
Efficiency (η_0) (%)	0.20
Efficiency Bandwidth Product (EBP) (Fs/Qes)	64.3

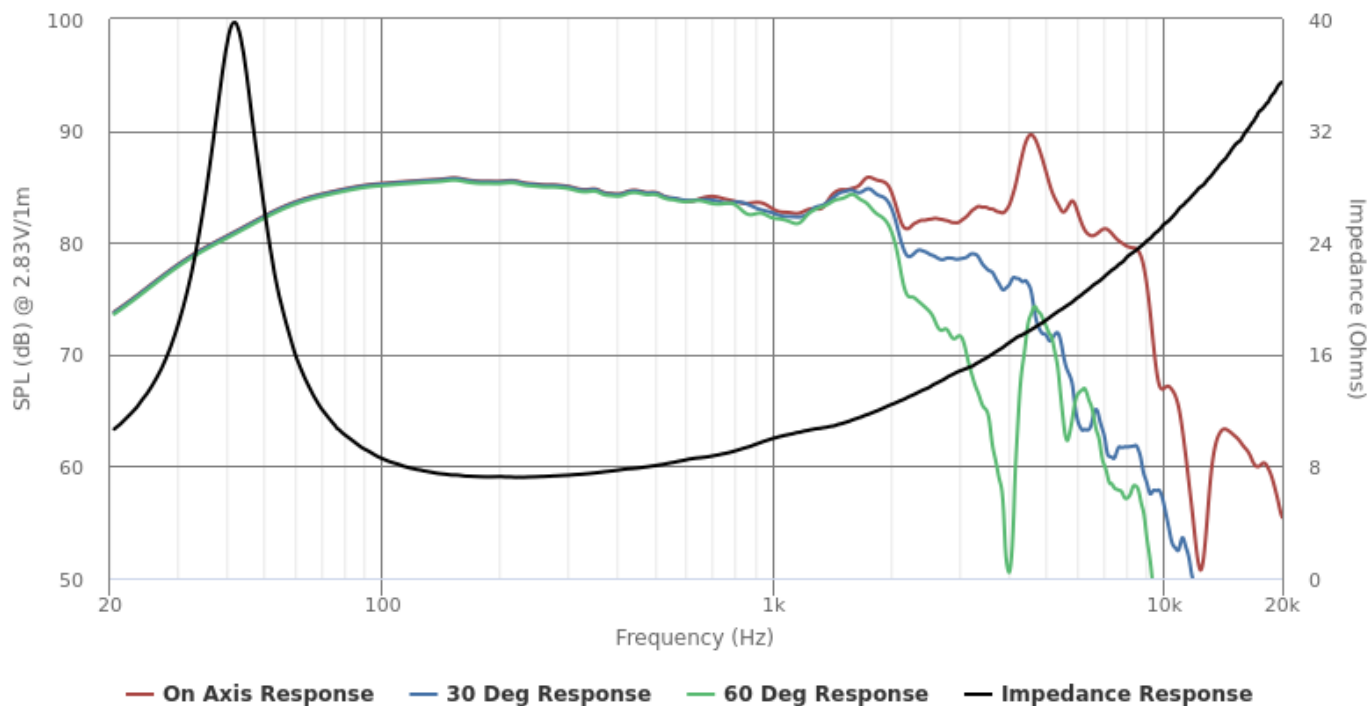
Material Descriptions

Basket Type	Die cast aluminum black powder coat
Terminal Size (mm)	6.3 x 0.8 mm / 4.7 x 0.5 mm
Voice Coil Diameter (mm)	38.7
Voice Coil Wire Material	Aluminum
Voice Coil Former Material	Aluminum
Magnet Material	Ferrite
Magnet Weight (gm)	568
Cone Body Material	Polypropylene

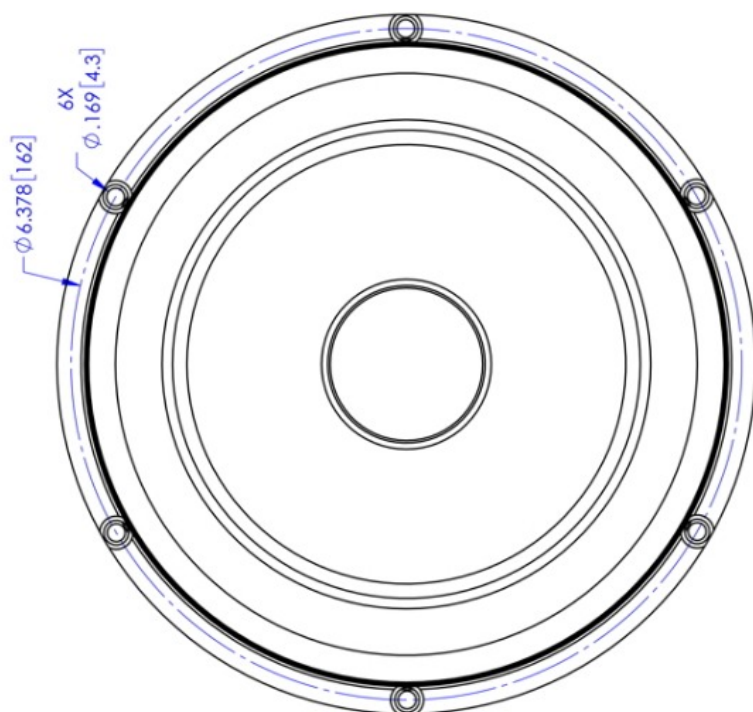
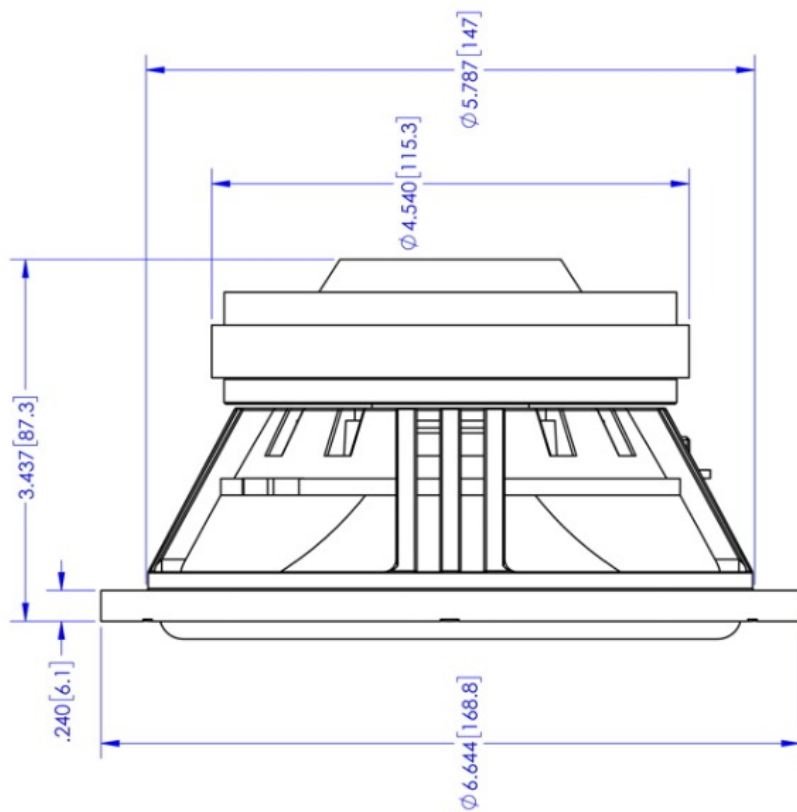
Cone Surround Material	Molded rubber
Spider Material	Flat formed cloth
Dust Cap Material	Insert cloth dust cap
Net Weight (kg)	2.07



Frequency & Impedance Response



Highcharts.com



MODEL: 165-WF08-01 P/N: 93037

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