

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

<b>Size, Nominal (inch &amp; mm)</b>	6" (152 mm)
<b>Rated Impedance (<math>\Omega</math>)</b>	8
<b>Continuous Power (W)</b>	50
<b>Sensitivity (dB SPL) <sup>1</sup></b>	86
<b>Frequency Range (Hz)</b>	70 - 7, 500
<b>Resonant Frequency (Fs) (Hz) +/- 15%</b>	41

### More Specifications

<b>Application</b>	High-End Audio and Home Theater
<b>RoHS Compliant</b>	No
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	6.6
<b>Program Power (W)</b>	100
<b>Continuous Power (W)</b>	50

### Small Signal Parameters

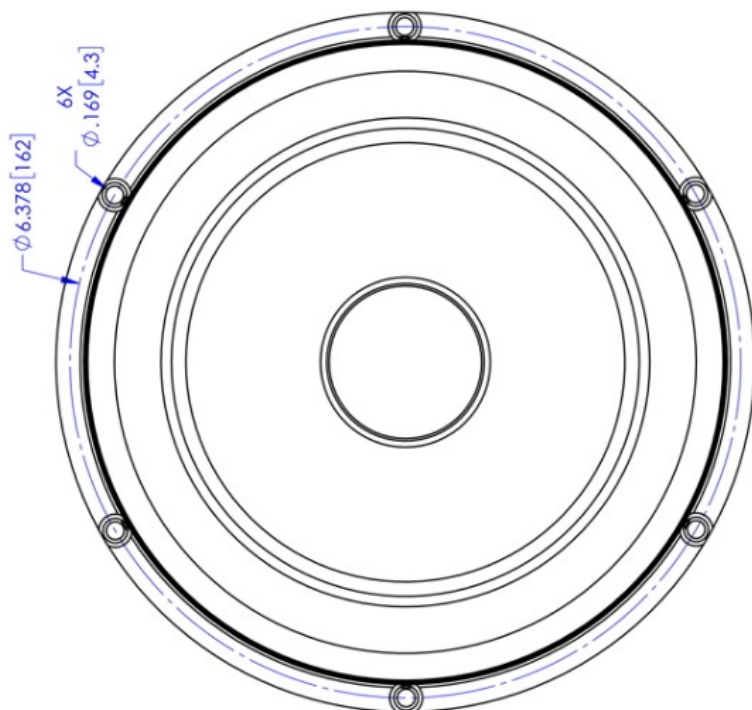
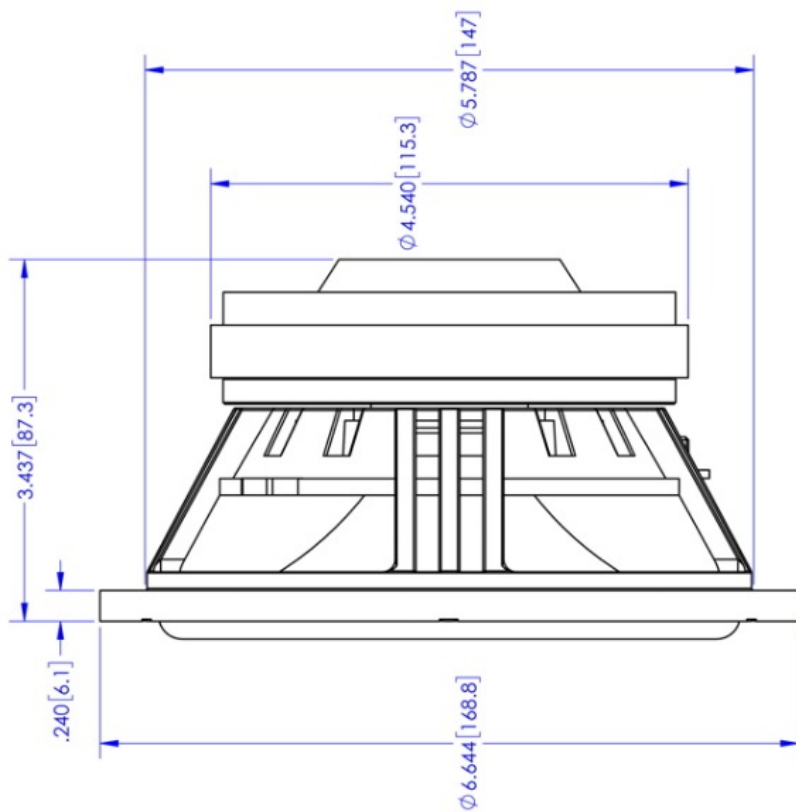
<b>Nominal Impedance (Z) (<math>\Omega</math>)</b>	8
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	6.6
<b>Voice Coil Inductance (Le) (mH)</b>	0.59
<b>Resonant Frequency (Fs) (Hz) +/- 15%</b>	41
<b>Mechanical Q Factor (Qms)</b>	3.21
<b>Electrical Q Factor (Qes)</b>	0.64
<b>Total Q Factor (Qts)</b>	0.54
<b>Moving Mass (Mms) (gm)</b>	19.3
<b>Suspension Compliance (Cms) (mm/N)</b>	0.77
<b>Mechanical Resistance (Rms) (kg/s)</b>	1.56
<b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b>	130.7
<b>Compliance Equivalent Volume (Vas) (L)</b>	18.56
<b>Maximum Linear Excursion (Xmax) (mm)</b>	4.4
<b>Coil Winding Height (mm)</b>	15.2
<b>Magnetic Gap Height (mm)</b>	6.4
<b>Motor Force Factor (BL) (T•M)</b>	7.2
<b>Efficiency (<math>\eta_0</math>) (%)</b>	0.20
<b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>	64.3

### Material Descriptions

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

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





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

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