MODEL #: 165-WF04-01

6.5 INCH (165 MM) 4 OHM, PREMIUM WOOFER

PART #: 93034

This premium 6.5" Oaktron woofer was engineered for high quality two-way systems. Its robust die cast aluminum basket supports an Abaca fiber cone with a molded NBR half-roll surround for a smooth frequency response and warm timbre. The voice coil is four layers of copper to provide a gradual roll-off. A dual dust cap system provides additional stability in the critical cross-over region.

- Woofer
- 6.5" (165 mm) basket diameter
- 50 watts, 4 ohms, 87 dB SPL
- 1.5" aluminum voice coil, polyimide film former
- Engineered Abaca fiber 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" (152 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	50
Sensitivity (dB SPL) [1]	87
Frequency Range (Hz)	36 - 4, 000
Resonant Frequency (Fs) (Hz) +/- 15%	41

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More Specifications

Application	High-End Audio and Home Theater, Home Audio, Indoor
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	4.0
Program Power (W)	100
Continuous Power (W)	50

Small Signal Parameters

Nominal Impedance (Z) (Ω)	4
DC Resistance (Re) (Ω)	4.0
Voice Coil Inductance (Le) (mH)	0.76
Resonant Frequency (Fs) (Hz) +/- 15%	41
Mechanical Q Factor (Qms)	7.69
Electrical Q Factor (Qes)	0.42
Total Q Factor (Qts)	0.4
Moving Mass (Mms) (gm)	21.1
Suspension Compliance (Cms) (mm/N)	0.73
Mechanical Resistance (Rms) (kg/s)	0.70
Surface Area of Diaphragm (Sd) (cm^2)	130.7
Compliance Equivalent Volume (Vas) (L)	17.57
Maximum Linear Excursion (Xmax) (mm)	6.2
Coil Winding Height (mm)	18.8
Magnetic Gap Height (mm)	6.4
Motor Force Factor (BL) (T•M)	7.2
Efficiency (η_0) (%)	0.27
Efficiency Bandwidth Product (EBP) (Fs/Qes)	96.9

Material Descriptions

Basket Type	Die cast aluminum with 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	Copper clad aluminum
Voice Coil Former Material	Polyimide film
Magnet Material	Ferrite
Magnet Weight (g)	568
Cone Body Material	Engineered abaca fiber

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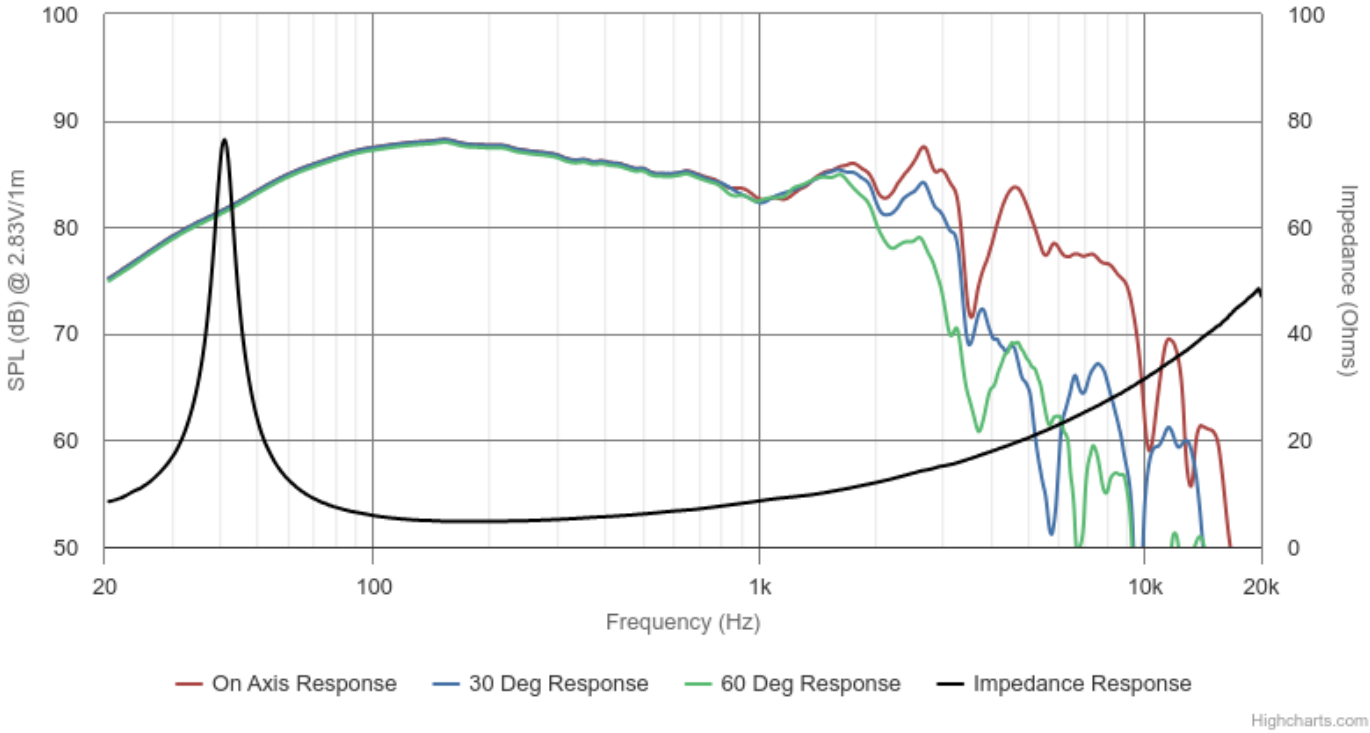
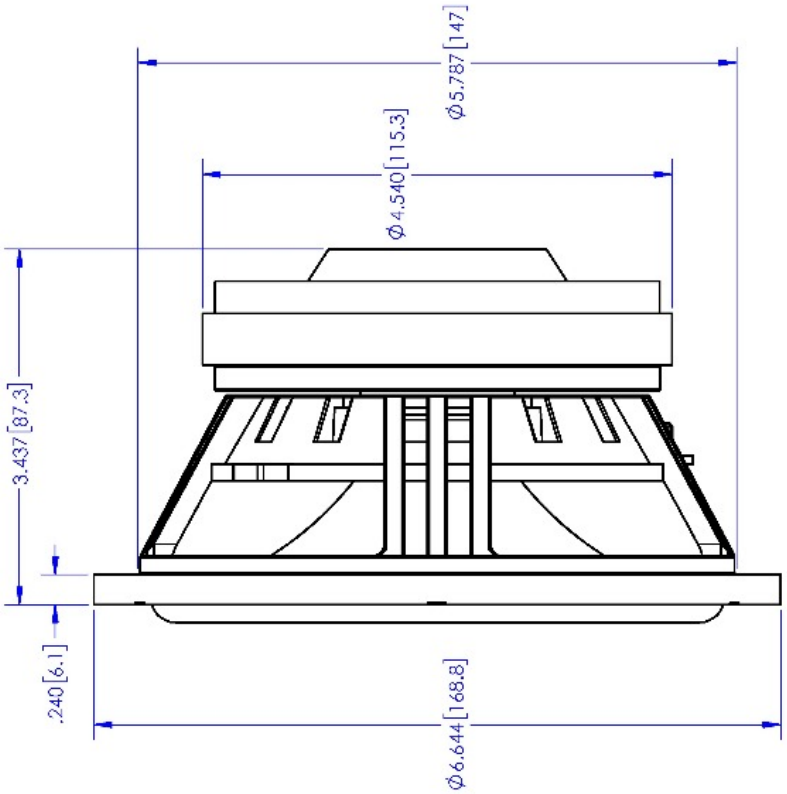
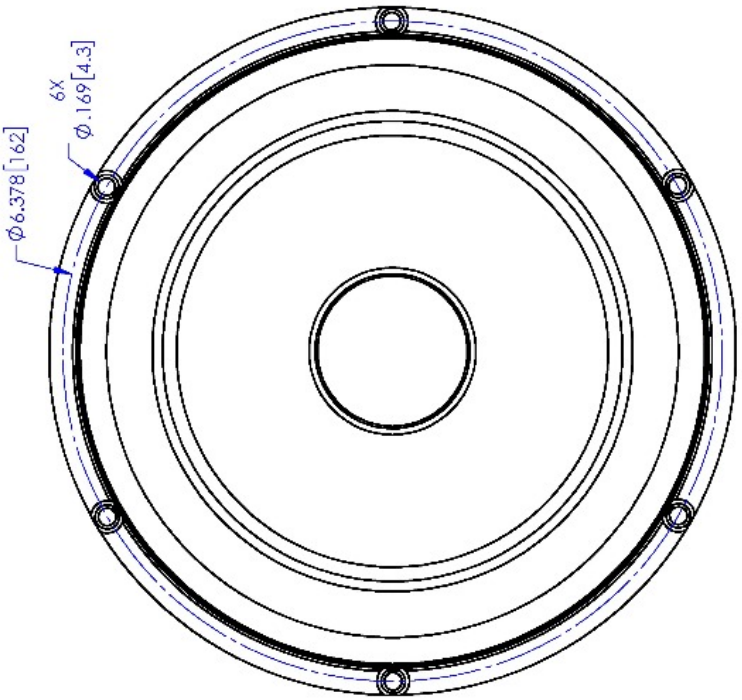
Cone Surround Material	Molded rubber
Spider Material	Conex
Dust Cap Material	Treated cloth
Net Weight (kg)	2.1

Frequency & Impedance Response







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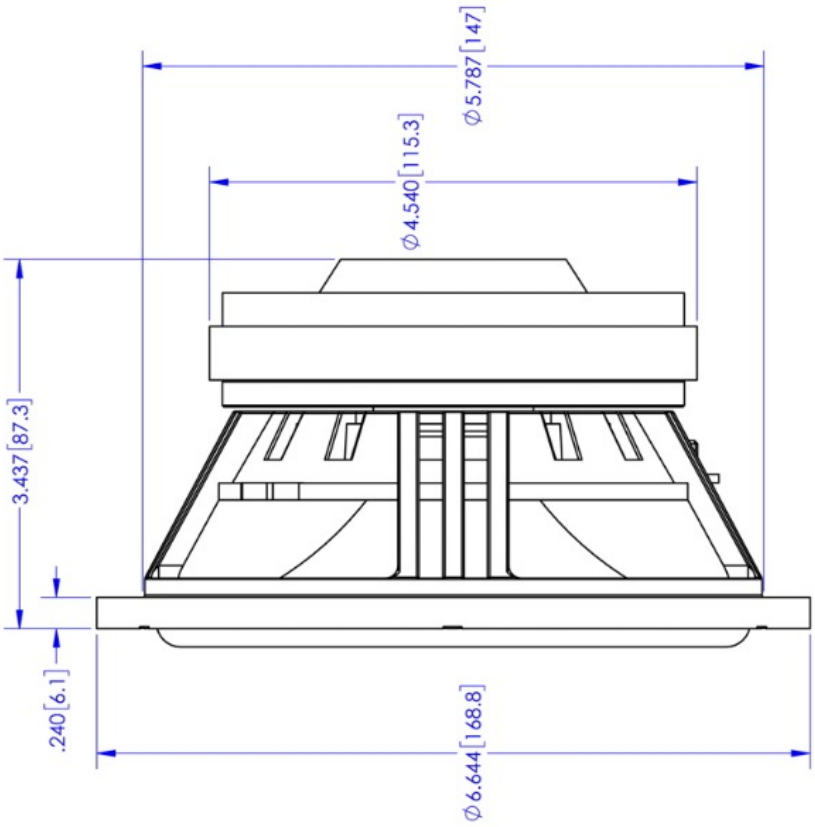

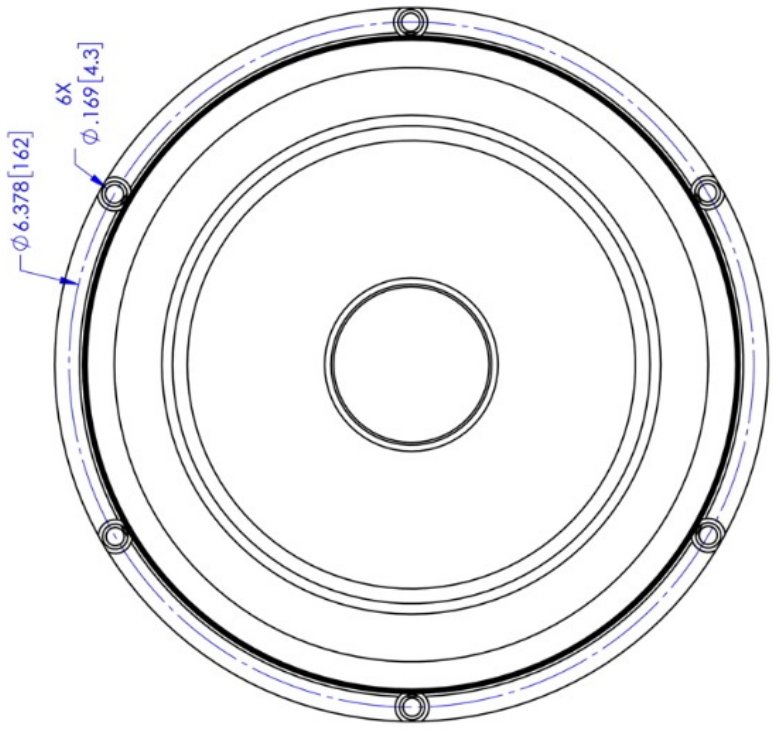

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