

This versatile 4.5" speaker provides broad band frequency response from 80 - 13,000 Hz. The cone is carefully engineered from a proprietary paper stock to be both stiff and lightweight. The cone surround is treated cloth providing compliance and alignment. The voice coil is made of copper clad aluminum wire to provide extended response. It has a powerful 12 oz ferrite magnet with a vented pole for excellent thermal management.

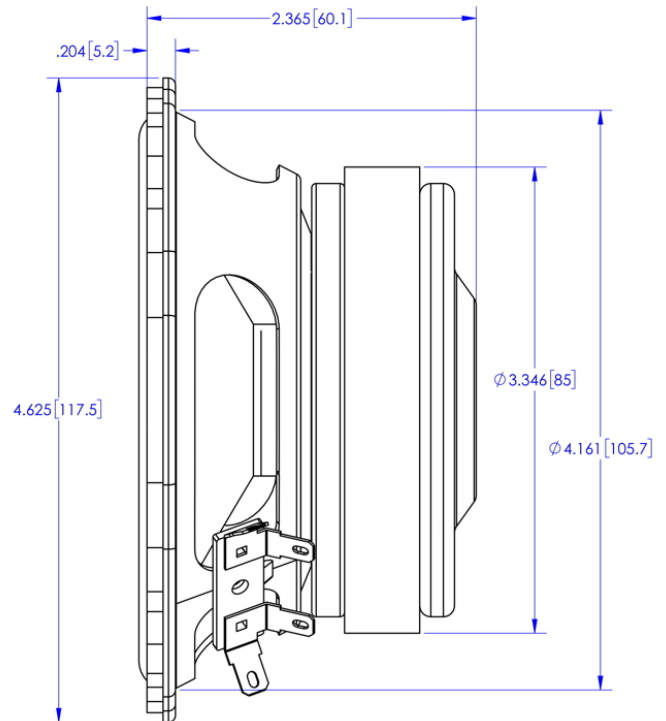
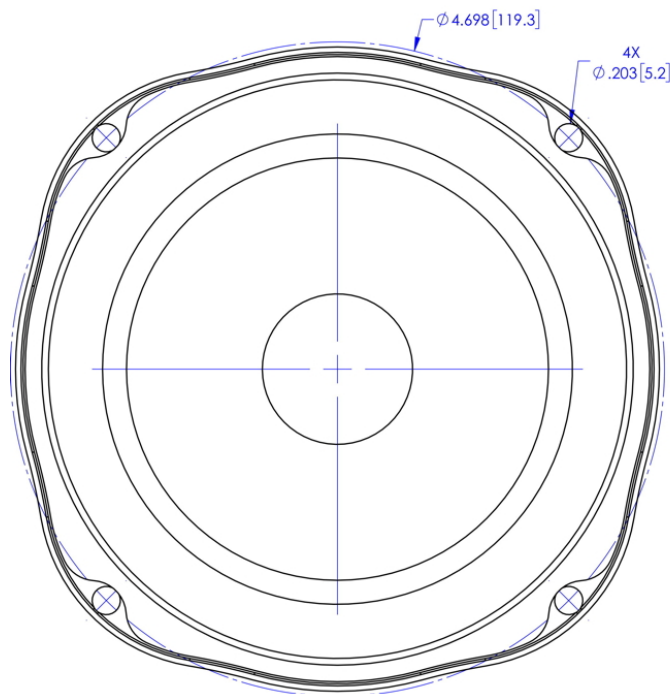
- Powerful ferrite ring magnet
- Engineered paper pulp body for extended frequency range.
- Ultra light weight, CCAW Voice Coil for low moving mass
- Full half roll convex molded cloth surround
- Black Powder Coated Steel Basket

MISCO engineers test and analyze the performance of these speakers, using world's most loudspeaker measurement systems including Klippel Analyzer and 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.



### Primary Specifications

<b>Size, Nominal (inch &amp; mm)</b>	4.5" (114 mm)
<b>Rated impedance (<math>\Omega</math>)</b>	8
<b>Power, Continuous (W)</b>	40
<b>Sensitivity (dB SPL) <sup>1</sup></b>	92
<b>Frequency range (Hz)</b>	80 - 15, 000
<b>Resonant Frequency (Fs) (Hz)</b>	100



### More Specifications

<b>Application</b>	Arcade Gaming, Auto / Motorcycle, Commercial, Home Audio, Indoor, Kiosk, Musical Instruments, Pro Sound
<b>RoHS Compliant</b>	Yes
<b>DC resistance (Re) (<math>\Omega</math>)</b>	6.1
<b>Power, Program (W)</b>	80
<b>Power, Continuous (W)</b>	40

### Small Signal Parameters

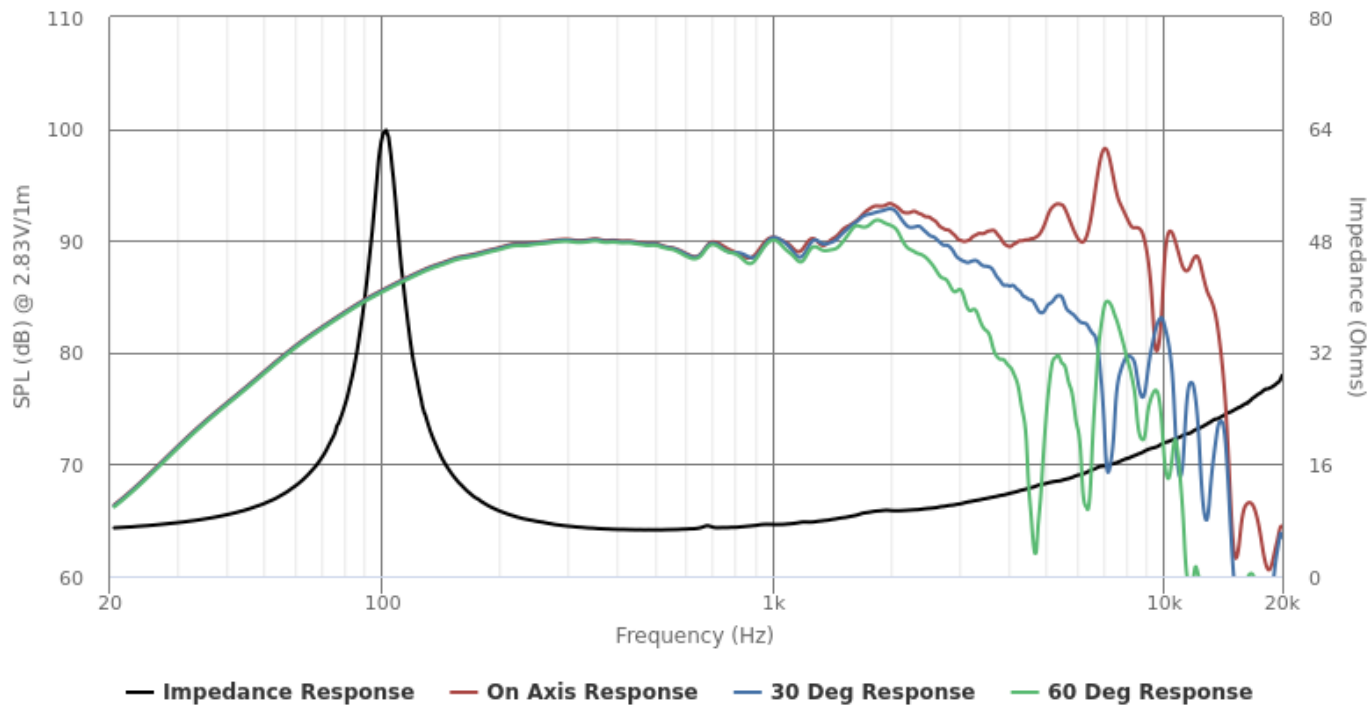
<b>DC resistance (Re) (<math>\Omega</math>)</b>	6.1
<b>Voice Coil Inductance (Le) (mH)</b>	0.29
<b>Resonant Frequency (Fs) (Hz)</b>	100
<b>Mechanical Q factor (Qms)</b>	5.26
<b>Electrical Q Factor (Qes)</b>	0.57
<b>Total Q factor (Qts)</b>	0.50
<b>Moving mass (Mms) (gm)</b>	4.34
<b>Suspension Compliance (Cms) (mm/N)</b>	0.58
<b>Mechanical Resistance (Rms) (kg/s)</b>	0.52
<b>Surface area of diaphragm (Sd) (cm<sup>2</sup>)</b>	73.90
<b>Compliance equivalent volume (Vas) (L)</b>	4.47
<b>Motor Force Factor (BL) (T•M)</b>	5.4
<b>Efficiency (<math>\eta_0</math>) (%)</b>	0.77
<b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>	176

### Material Descriptions

<b>Basket type</b>	Stamped Steel with black powder coat
<b>Terminal size</b>	5.2 x 0.5 mm (0.205" x 0.020")
<b>Voice coil diameter (mm)</b>	25.8 (1.02")
<b>Voice coil wire material</b>	Copper Clad Aluminum
<b>Voice coil former material</b>	Polyimide (Kapton)
<b>Magnet Material</b>	Ferrite
<b>Magnet weight (gm)</b>	336 (12 oz)
<b>Cone body material</b>	Engineered Paper with treat
<b>Cone surround material</b>	Half roll, pre-treated cloth
<b>Spider Material</b>	Cloth
<b>Dust cap material</b>	Engineered Paper with treat
<b>Net weight (kg)</b>	0.81



## Frequency & Impedance Response



Highcharts.com

