

Dual voice coil 200-watt subwoofer was designed to use the energy from both the left and right channels simultaneously. This driver is designed for home or car audio, featuring a rigid black powder coated cast aluminum basket, a treated pulp cones with a polyether foam surround, and comes with a decorative rubber trim ring which aids enclosure sealing.

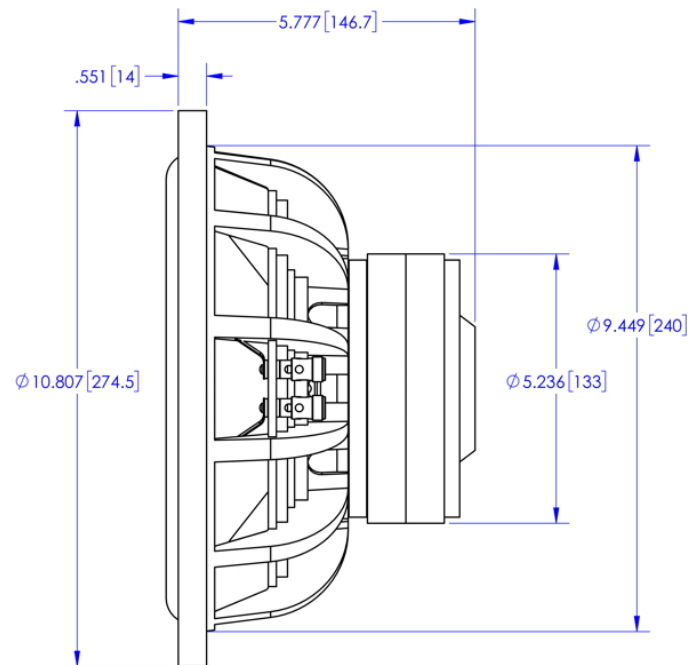
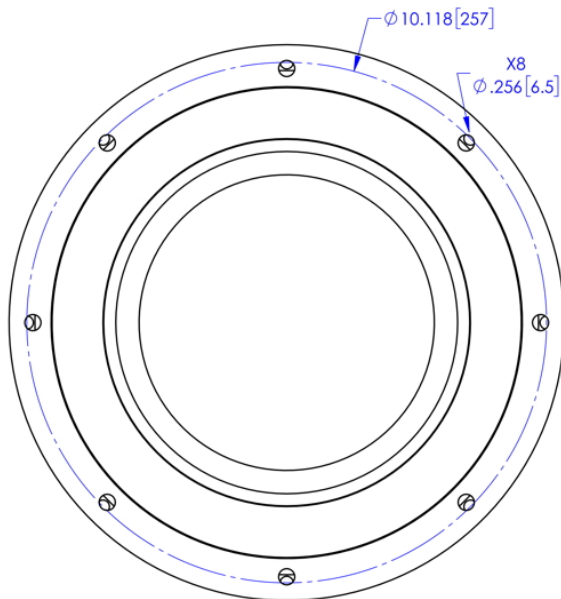
- Subwoofer
- 10" (250 mm) basket diameter
- 100 watts, 4 ohms, 88 dB SPL
- 2" copper voice coil, aluminum former
- Ferrite magnet, die cast aluminum basket
- Engineered Abaca fiber cone, polyether foam surround

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.



### Primary Specifications

<b>Size, Nominal (inch &amp; mm)</b>	10" (250 mm)
<b>Rated Impedance (<math>\Omega</math>)</b>	4
<b>Continuous Power (W)</b>	100
<b>Sensitivity (dB SPL) <sup>1</sup></b>	88
<b>Frequency Range (Hz)</b>	20 - 200
<b>Resonant Frequency (Fs) (Hz)</b>	31



### More Specifications

<b>Application</b>	Auto / Motorcycle, High-End Audio and Home Theater, Home Audio
<b>RoHS Compliant</b>	Yes
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	1.9
<b>Program Power (W)</b>	200
<b>Continuous Power (W)</b>	100

### Small Signal Parameters

<b>Nominal Impedance (Z) (<math>\Omega</math>)</b>	4
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	1.9
<b>Voice Coil Inductance (Le) (mH)</b>	24.81
<b>Resonant Frequency (Fs) (Hz)</b>	31
<b>Mechanical Q Factor (Qms)</b>	6.96
<b>Electrical Q Factor (Qes)</b>	0.39
<b>Total Q Factor (Qts)</b>	0.37
<b>Moving Mass (Mms) (gm)</b>	106.6
<b>Suspension Compliance (Cms) (mm/N)</b>	0.26
<b>Mechanical Resistance (Rms) (kg/s)</b>	2.94
<b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b>	330.1
<b>Compliance Equivalent Volume (Vas) (L)</b>	39.27
<b>Maximum Linear Excursion (Xmax) (mm)</b>	15.4
<b>Coil Winding Height (mm)</b>	40.3
<b>Magnetic Gap Height (mm)</b>	9.5
<b>Motor Force Factor (BL) (T•M)</b>	9.9
<b>Efficiency (<math>\eta_0</math>) (%)</b>	39.27
<b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>	77.7

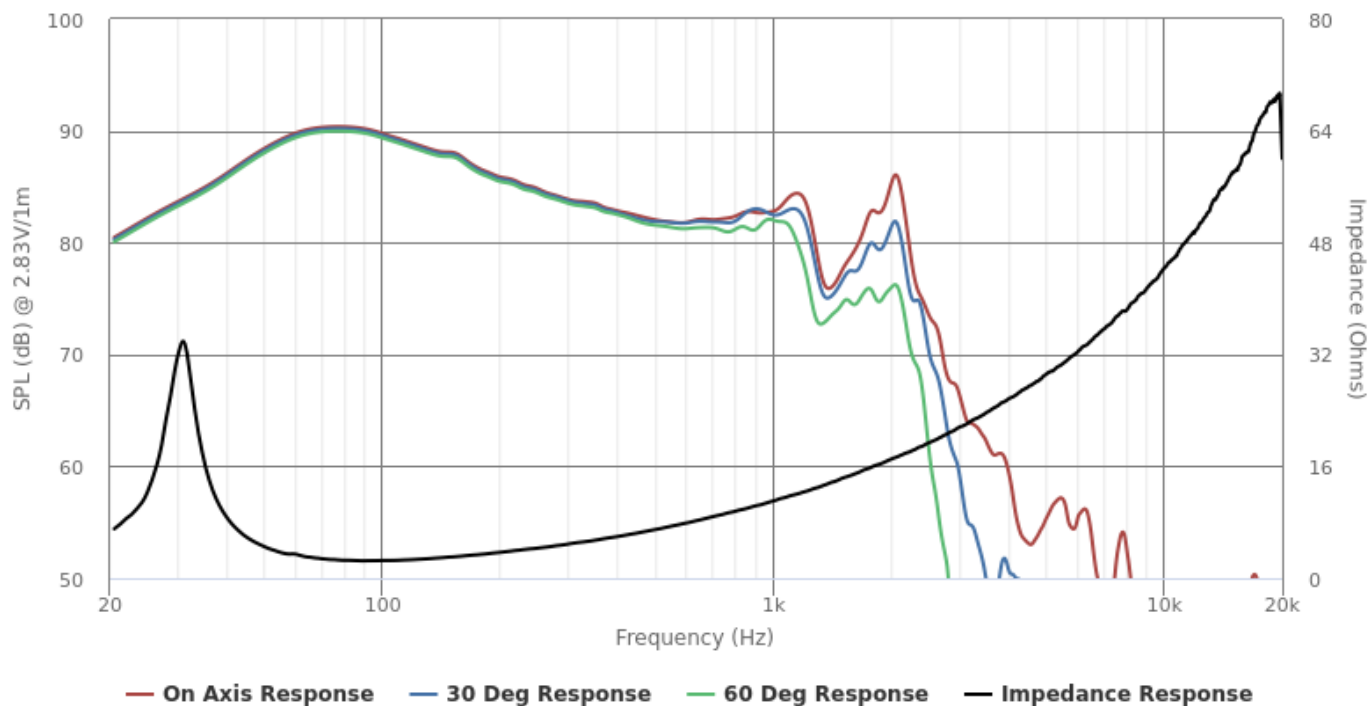
### Material Descriptions

<b>Basket Type</b>	Die cast aluminum basket with black powder coat finish
<b>Terminal Size (mm)</b>	Knurled push style spring connectors
<b>Voice Coil Diameter (mm)</b>	51.3
<b>Voice Coil Wire Material</b>	Round copper wire
<b>Voice Coil Former Material</b>	Aluminum
<b>Magnet Material</b>	Ferrite
<b>Magnet Weight (gm)</b>	2166

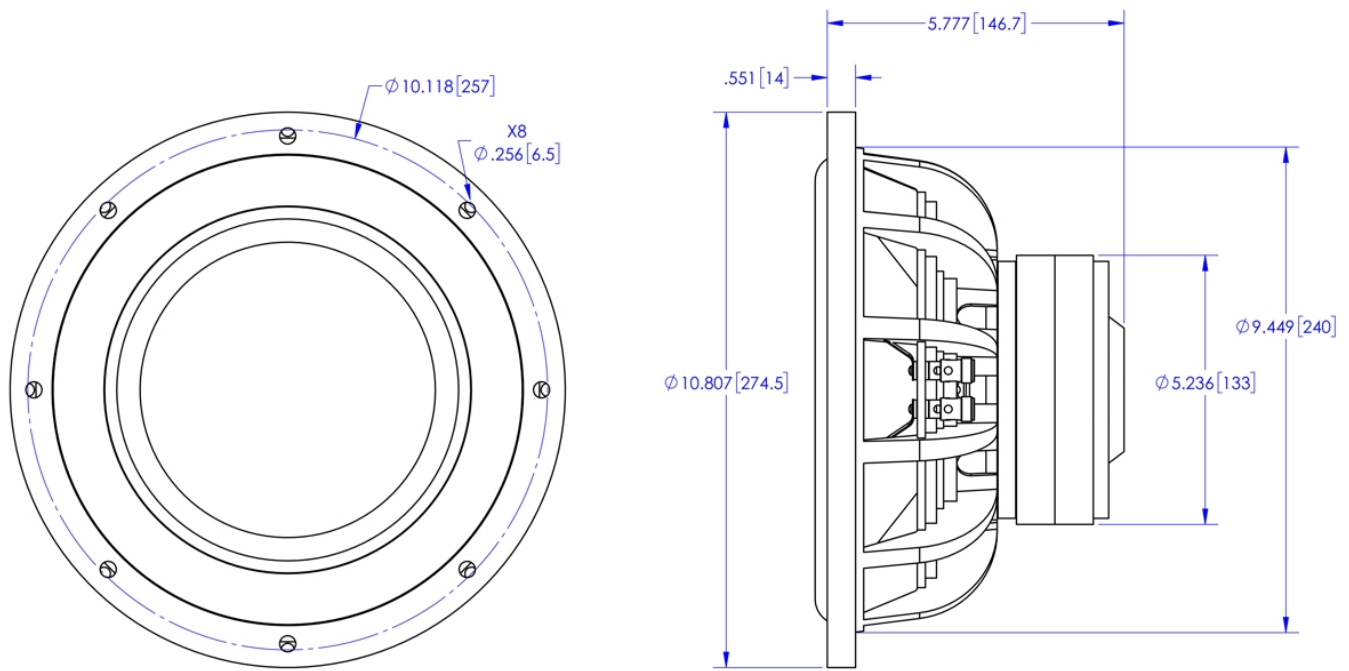
<b>Cone Body Material</b>	Abaca fiber with wet look treat
<b>Cone Surround Material</b>	Heavy-duty polyether foam
<b>Spider Material</b>	Durable polycotton
<b>Dust Cap Material</b>	Inverted engineered paper dome
<b>Net Weight (kg)</b>	5.37



## Frequency & Impedance Response



Highcharts.com



OAKTRON  
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MODEL: 250-SW04D-01 P/N: 93052