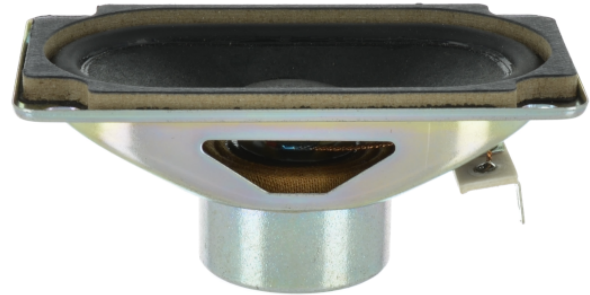


The Oaktron 93016 is a race-track shaped speaker for full range audio in your game machines, kiosks, and other space conscious applications that produce energetic, performative audio.

- Full range wide band speaker
- 2" x 3.5" (50 mm x 90 mm) steel basket size
- 7 watts, 4 ohm, 88 dB SPL
- 0.8" copper voice coil, paper former
- Neodymium magnet, paper cone with natural rubber surround
- RoHS compliant

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 confirm the final design.



### Primary Specifications

<b>Size, Nominal (inch &amp; mm)</b>	2" Oval (50 mm)
<b>Rated Impedance (<math>\Omega</math>)</b>	4
<b>Sensitivity (dB SPL) <sup>1</sup></b>	88
<b>Frequency Range (Hz)</b>	160 - 20, 000
<b>Resonant Frequency (Fs) (Hz)</b>	208

### More Specifications

<b>Application</b>	Arcade Gaming, Casino Gaming, Drive-Thru / Kiosk, Outdoor
<b>RoHS Compliant</b>	Yes
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	3.8
<b>Program Power (W)</b>	14

### Small Signal Parameters

<b>Nominal Impedance (Z) (<math>\Omega</math>)</b>	4
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	3.8
<b>Voice Coil Inductance (Le) (mH)</b>	0.10
<b>Resonant Frequency (Fs) (Hz)</b>	208
<b>Mechanical Q Factor (Qms)</b>	3.84
<b>Electrical Q Factor (Qes)</b>	1.65
<b>Total Q Factor (Qts)</b>	1.15
<b>Moving Mass (Mms) (gm)</b>	1.55
<b>Suspension Compliance (Cms) (mm/N)</b>	0.25
<b>Mechanical Resistance (Rms) (kg/s)</b>	0.64
<b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b>	21.49
<b>Compliance Equivalent Volume (Vas) (L)</b>	0.17
<b>Motor Force Factor (BL) (T•M)</b>	2.4
<b>Efficiency (<math>\eta_0</math>) (%)</b>	0.16
<b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>	154.64

### Material Descriptions

<b>Basket Type</b>	Stamped Steel
<b>Terminal Size (mm)</b>	0.110 x 0.02 / 0.205 x 0.02
<b>Voice Coil Diameter (mm)</b>	20.3
<b>Voice Coil Wire Material</b>	Copper
<b>Voice Coil Former Material</b>	Paper
<b>Magnet Material</b>	Neodymium
<b>Magnet Weight (g)</b>	11
<b>Cone Body Material</b>	Paper
<b>Cone Surround Material</b>	Cloth
<b>Dust Cap Material</b>	Paper
<b>Net Weight (kg)</b>	100



## Frequency & Impedance Response

