

The 93005 provides an indoor, wide-range sound solution with a rear mounting design at an affordable price. A ferrite magnet and steel basket with a paper cone make this speaker ideal for gaming cabinets, medical devices, and music systems.

- Wide Range Speaker
- 2.5 inch (66 mm) basket diameter
- 2 watts, 4 ohms, 89 dB SPL
- 0.5 inch copper voice coil
- Ferrite magnet, stamped steel basket
- Paper cone, inverted cloth surround

Oaktron by MISCO is a premium line of high-performance, ready-toship transducers and drivers for a wide variety of applications, including high fidelity, arcade and casino games, automotive, aerospace, 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.

MISCO engineers use the world's most sophisticated loudspeaker measurement systems, including the Klippel Analyzer, to maximize and validate the speaker's design, as well as the Klippel QC module to ensure perfect unit-to-unit consistency and reliability.



Primary Specifications

Size, Nominal (inch & mm)	2" (50 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	2
Sensitivity (dB SPL) ¹	89
Frequency Range (Hz)	140 - 20, 000
Resonant Frequency (Fs) (Hz) +/- 15%	341



OAKTRON

PART #: 93005

More Specifications

Application	Arcade Gaming, Casino Gaming, Voice Communications
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	3.3
Program Power (W)	4
Continuous Power (W)	2

Small Signal Parameters

Nominal Impedance (Ζ) (Ω)	4
DC Resistance (Re) (Ω)	3.3
Voice Coil Inductance (Le) (mH)	0.07
Resonant Frequency (Fs) (Hz) +/- 15%	341
Mechanical Q Factor (Qms)	8.21
Electrical Q Factor (Qes)	3.33
Total Q Factor (Qts)	2.37
Moving Mass (Mms) (gm)	1.3
Suspension Compliance (Cms) (mm/N)	0.17
Mechanical Resistance (Rms) (kg/s)	0.332
Surface Area of Diaphragm (Sd) (cm²)	21.7
Compliance Equivalent Volume (Vas) (L)	0.11
Motor Force Factor (BL) (T•M)	1.7
Efficiency (η₀) (%)	0.13
Efficiency Bandwidth Product (EBP) (Fs/Qes)	102.5

Material Descriptions

Basket Type	Stamped steel
Voice Coil Diameter (mm)	14.5288
Voice Coil Wire Material	Copper
Magnet Material	Ferrite
Magnet Weight (g)	49.04
Cone Body Material	Paper
Net Weight (kg)	0.14













