

The 93007 wide range speaker is an excellent choice for compact applications requiring high fidelity music, or high intelligibility voice/communications audio. A talc-filled, polypropylene cone with a rubber surround allows this driver to be used either indoors or outdoors. Ideal applications include home theaters, alarm and security systems, gaming and arcade cabinets, kiosk audio, smart devices, and more.

- Wide range speaker
- 3" (77 mm) basket diameter
- 20 watts, 8 ohms, 83 dB SPL
- 0.8" copper voice coil, aluminum former
- Ferrite magnet, stamped steel basket
- Polypropylene cone, rubber surround

Oaktron by *MISCO* is a premium line of high performance, ready-to-ship 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)	3" (77 mm)
Rated Impedance (Ω)	8
Continuous Power (W)	10
Sensitivity (dB SPL) ¹	83
Frequency Range (Hz)	103 - 15, 000
Resonant Frequency (Fs) (Hz) +/- 15%	103

More Specifications

Application	Arcade Gaming, Casino Gaming, Indoor, Drive-Thru / Kiosk, Outdoor
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	6.7
Program Power (W)	20
Continuous Power (W)	10

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.7
Voice Coil Inductance (Le) (mH)	0.24
Resonant Frequency (Fs) (Hz) +/- 15%	103
Mechanical Q Factor (Qms)	3.07
Electrical Q Factor (Qes)	1.48
Total Q Factor (Qts)	1.00
Moving Mass (Mms) (gm)	3.7
Suspension Compliance (Cms) (mm/N)	0.65
Mechanical Resistance (Rms) (kg/s)	0.78
Surface Area of Diaphragm (Sd) (cm²)	29.2
Compliance Equivalent Volume (Vas) (L)	0.78
Maximum Linear Excursion (Xmax) (mm)	0.6
Coil Winding Height (mm)	5.7
Magnetic Gap Height (mm)	4.5
Motor Force Factor (BL) (T•M)	3.3
Efficiency (η_0) (%)	0.06
Efficiency Bandwidth Product (EBP) (Fs/Qes)	69.2

Material Descriptions

Basket Type	Stamped steel with black powder coat
Terminal Size (mm)	5.2 x 0.5
Voice Coil Diameter (mm)	19.38
Voice Coil Wire Material	Copper
Voice Coil Former Material	Aluminum
Magnet Material	Ferrite
Magnet Weight (g)	85.05
Cone Body Material	Talc filled polypropylene

Cone Surround Material	Rubber
Spider Material	Conex
Dust Cap Material	Talc filled polypropylene
Net Weight (kg)	0.1



