

This wide range speaker provides high output and sensitivity in a small package. A woven Kevlar cone with treated half roll cloth edge provides extended frequency response and durability in a wide variety of applications. It is also an excellent choice for extended frequency ranges used for gaming audio, ultra-sound audio, and broad range music or voice.

- Wide range speaker
- 2.25" (57 mm) basket diameter
- 10 watts, 8 ohms, 80 dB SPL
- 0.8" aluminum voice coil, kapton former
- Dual neodymium magnet, stamped steel
- Kevlar fiber 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 confirm 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)	8
Continuous Power (W)	10
Sensitivity (dB SPL) ¹	80
Frequency Range (Hz)	140 - 18,000
Resonant Frequency (Fs) (Hz)	167

More Specifications

Application	Aerospace, Arcade Gaming, Casino Gaming, Home Audio, Drive-Thru / Kiosk, Medical, Musical Instruments, Voice Communications
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	7.3
Program Power (W)	20
Continuous Power (W)	10

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	7.3
Voice Coil Inductance (Le) (mH)	0.16
Resonant Frequency (Fs) (Hz)	167
Mechanical Q Factor (Qms)	2.35
Electrical Q Factor (Qes)	0.77
Total Q Factor (Qts)	0.58
Moving Mass (Mms) (gm)	2.0
Suspension Compliance (Cms) (mm/N)	0.45
Mechanical Resistance (Rms) (kg/s)	0.91
Surface Area of Diaphragm (Sd) (cm²)	15.2
Compliance Equivalent Volume (Vas) (L)	0.15
Maximum Linear Excursion (Xmax) (mm)	
Coil Winding Height (mm)	
Magnetic Gap Height (mm)	
Motor Force Factor (BL) (T•M)	4.5
Efficiency (η_0) (%)	0.09
Efficiency Bandwidth Product (EBP) (Fs/Qes)	217.2

Material Descriptions

Basket Type	Stamped steel
Terminal Size (mm)	5.2 x 0.5 / 2.8 x 0.5
Voice Coil Diameter (mm)	20.3
Voice Coil Wire Material	Aluminum
Voice Coil Former Material	Kapton
Magnet Material	Dual neodymium
Magnet Weight (g)	34

Cone Body Material	Woven kevlar fiber
Cone Surround Material	Rubber
Spider Material	Conex
Dust Cap Material	Cloth
Net Weight (kg)	0.13



Frequency & Impedance Response



