

The 93090 wide-range speaker serves as a durable replacement driver for car audio systems. This Oaktron speaker delivers crisp upper frequencies thanks to its secondary high-frequency paper cone and a large ferrite magnet.

- Wide range speaker
- 5 in. x 7 in. (127 mm x 179 mm) basket diameter
- 15 watts, 4 ohms, 95 dB SPL
- 1 in. copper voice coil, aluminum former
- Ferrite magnet, stamped-steel basket
- Paper cone, treated cloth 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)	5" Oval (127 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	15
Sensitivity (dB SPL) ¹	95
Frequency Range (Hz)	75 - 12, 000
Resonant Frequency (Fs) (Hz) +/- 15%	121

More Specifications

Application	Home Audio
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	3.4
Program Power (W)	30
Continuous Power (W)	15

Small Signal Parameters

Nominal Impedance (Z) (Ω)	4
DC Resistance (Re) (Ω)	3.4
Voice Coil Inductance (Le) (mH)	0.14
Resonant Frequency (Fs) (Hz) +/- 15%	121
Mechanical Q Factor (Qms)	3.71
Electrical Q Factor (Qes)	1.04
Total Q Factor (Qts)	0.81
Moving Mass (Mms) (gm)	6.4
Suspension Compliance (Cms) (mm/N)	0.27
Mechanical Resistance (Rms) (kg/s)	1.30
Surface Area of Diaphragm (Sd) (cm²)	124.1
Compliance Equivalent Volume (Vas) (L)	5.96
Maximum Linear Excursion (Xmax) (mm)	0.8
Coil Winding Height (mm)	6
Magnetic Gap Height (mm)	4.5
Motor Force Factor (BL) (T•M)	4.0
Efficiency (η_0) (%)	0.97
Efficiency Bandwidth Product (EBP) (Fs/Qes)	116.5

Material Descriptions

Basket Type	Stamped steel
Terminal Size (mm)	14.3 x 3.2
Voice Coil Diameter (mm)	25.8
Voice Coil Wire Material	Copper
Voice Coil Former Material	Aluminum
Magnet Material	Ferrite
Magnet Weight (g)	283.5
Cone Body Material	Paper
Cone Surround Material	Treated cloth

Dust Cap Material	Paper
Net Weight (kg)	0.85

