

The 93031 Neo-Rite Woofer uses a compound magnet to operate in high-power music systems. Install this driver into small enclosures meant for home theaters, pro-sound, and gaming cabinets.

- Woofer
- 5.25 inch (133 mm) basket diameter
- 50 watts, 4 ohms, 87 dB SPL
- 1 in. copper voice coil, aluminum former
- Neodymium/ferrite magnet, stamped-steel basket
- Polypropylene cone, Santoprene surround

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 are used to validate the final design.

Oaktron by MISCO is the premium line of high-performance, ready-to-ship transducers for a wide variety of applications, including high fidelity, musical instruments, automotive applications, 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.

Pair this woofer with one of our [MISCO Amplifiers](#).



Primary Specifications

Size, Nominal (inch & mm)	5.25" (133 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	50
Sensitivity (dB SPL) ¹	87
Frequency Range (Hz)	40 - 7, 500
Resonant Frequency (Fs) (Hz) +/- 15%	56

More Specifications

Application	Auto / Motorcycle, Home Audio
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	3.3
Program Power (W)	100
Continuous Power (W)	50

Small Signal Parameters

Nominal Impedance (Z) (Ω)	4
DC Resistance (Re) (Ω)	3.3
Voice Coil Inductance (Le) (mH)	0.35
Resonant Frequency (Fs) (Hz) +/- 15%	56
Mechanical Q Factor (Qms)	11.74
Electrical Q Factor (Qes)	0.56
Total Q Factor (Qts)	0.53
Moving Mass (Mms) (gm)	18.5
Suspension Compliance (Cms) (mm/N)	0.43
Mechanical Resistance (Rms) (kg/s)	0.56
Surface Area of Diaphragm (Sd) (cm²)	86.6
Compliance Equivalent Volume (Vas) (L)	4.59
Maximum Linear Excursion (Xmax) (mm)	3.8
Coil Winding Height (mm)	12.2
Magnetic Gap Height (mm)	4.5
Motor Force Factor (BL) (T•M)	6.3
Efficiency (η_0) (%)	0.14
Efficiency Bandwidth Product (EBP) (Fs/Qes)	101.1

Material Descriptions

Basket Type	Stamped steel with black powder coat
Terminal Size (mm)	4.7 x 0.5 mm
Voice Coil Diameter (mm)	25.8
Voice Coil Wire Material	Copper
Voice Coil Former Material	Aluminum
Magnet Material	Neodymium / ferrite
Magnet Weight (g)	12 oz ferrite + 1 oz neodymium
Cone Body Material	Mica filled polypropylene

Cone Surround Material	Santoprene
Spider Material	Woven cloth
Dust Cap Material	Mica filled polypropylene
Net Weight (kg)	0.96



