

When listening to your favorite music, you expect the sound to be pristine, unmarred by mechanical imperfections and acoustic inconsistencies. The 93078, a unique full-range loudspeaker, reproduces music as accurately as possible for high-end, single transducer systems without cross-over requirements.

To achieve this, MISCO designed the 93078 to stay faithful to the audio of original recordings. A sensitivity rating of 91 dB SPL means less power is required compared to other speakers this size. An organic hard fiber cone and cotton spider optimize this speaker's dispersion and damping capacities as well, resulting in an ideal transient response. With an EBP rating of 116, this driver is best suited for vented enclosures, all to reproduce your music according to your preferences.

Oaktron by MISCO is a premium line of high performance, ready-to-ship transducers and drivers for a wide variety of applications. From elegantly simple to highly specialized designs for unique and demanding applications, there is an Oaktron loudspeaker perfectly suited for your needs.



Primary Specifications

Size, Nominal (inch & mm)	4" (100 mm)
Rated Impedance (Ω)	8
Continuous Power (W)	25
Sensitivity (dB SPL) ¹	91
Frequency Range (Hz)	90 - 18, 000
Resonant Frequency (Fs) (Hz) +/- 15%	78

More Specifications

Application	Home Audio
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	6.6
Program Power (W)	50
Continuous Power (W)	25

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.6
Voice Coil Inductance (Le) (mH)	0.21
Resonant Frequency (Fs) (Hz) +/- 15%	78
Mechanical Q Factor (Qms)	3.78
Electrical Q Factor (Qes)	0.67
Total Q Factor (Qts)	0.57
Moving Mass (Mms) (gm)	3.0
Suspension Compliance (Cms) (mm/N)	1.37
Mechanical Resistance (Rms) (kg/s)	0.39
Surface Area of Diaphragm (Sd) (cm²)	63.6
Compliance Equivalent Volume (Vas) (L)	7.82
Maximum Linear Excursion (Xmax) (mm)	0.3
Coil Winding Height (mm)	5.1
Magnetic Gap Height (mm)	4.6
Motor Force Factor (BL) (T•M)	3.8
Efficiency (η_0) (%)	0.54
Efficiency Bandwidth Product (EBP) (Fs/Qes)	116.8

Material Descriptions

Basket Type	Stamped steel
Terminal Size (mm)	2.8 x 0.5 mm
Voice Coil Diameter (mm)	19.3802
Voice Coil Wire Material	Aluminum
Voice Coil Former Material	Kapton
Magnet Material	Ferrite
Magnet Weight (g)	283.5
Cone Body Material	Abaca fiber
Cone Surround Material	Treated cloth

Spider Material	Cotton
Dust Cap Material	Paper composite
Net Weight (kg)	0.73



