

MODEL #: 203-FR08-01

# 8 INCH (203 MM) 8 OHM, SINGLE DRIVER LOUDSPEAKER

PART #: 93087

From well-constructed melodies to simple riffs and chords, music has the potential to fuse into your most cherished memories and relationships. You deserve a listening experience faithful to the original recording, without unwanted acoustic distortions or mechanical distractions. For this reason, we designed the 93087, a unique full-range loudspeaker created to reproduce music with accuracy for high-end, single transducer systems without cross-over requirements.

To reach true fidelity, MISCO designed the 93087 with a sensitivity of 94 dB SPL, an exotic banana pulp, dual cone whizzer, a cotton spider for optimized dispersion and damping capacities, and an EBP rating of 98 – making this driver ideal for vented enclosures. With this driver, we guarantee trustworthy, reliable sound for your next homeaudio project.

Oaktron by MISCO is a premium line of high performance, ready-toship 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)            | 8" (203 mm)  |
|--------------------------------------|--------------|
| Rated Impedance ( $\Omega$ )         | 8            |
| Continuous Power (W)                 | 30           |
| Sensitivity (dB SPL) <sup>1</sup>    | 94           |
| Frequency Range (Hz)                 | 45 - 15, 000 |
| Resonant Frequency (Fs) (Hz) +/- 15% | 52           |



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#### **More Specifications**

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| Application                     | High-End Audio and Home Theater |
|---------------------------------|---------------------------------|
| RoHS Compliant                  | Yes                             |
| DC Resistance (Re) ( $\Omega$ ) | 6.0                             |
| Program Power (W)               | 60                              |
| Continuous Power (W)            | 30                              |

## **Small Signal Parameters**

| Nominal Impedance (Z) ( $\Omega$ )          | 8     |
|---|-------|
| DC Resistance (Re) (Ω)                      | 6.0   |
| Voice Coil Inductance (Le) (mH)             | 0.38  |
| Resonant Frequency (Fs) (Hz) +/- 15%        | 52    |
| Mechanical Q Factor (Qms)                   | 3.42  |
| Electrical Q Factor (Qes)                   | 0.53  |
| Total Q Factor (Qts)                        | 0.46  |
| Moving Mass (Mms) (gm)                      | 10.9  |
| Suspension Compliance (Cms) (mm/N)          | 0.85  |
| Mechanical Resistance (Rms) (kg/s)          | 1.05  |
| Surface Area of Diaphragm (Sd) (cm²)        | 221.7 |
| Compliance Equivalent Volume (Vas) (L)      | 59.05 |
| Maximum Linear Excursion (Xmax) (mm)        | 1.8   |
| Coil Winding Height (mm)                    | 9.9   |
| Magnetic Gap Height (mm)                    | 6.3   |
| Motor Force Factor (BL) (T•M)               | 6.4   |
| Efficiency (η₀) (%)                         | 1.55  |
| Efficiency Bandwidth Product (EBP) (Fs/Qes) | 98.5  |

#### **Material Descriptions**

| Basket Type                | Aluminum                    |
|----------------------------|-----------------------------|
| Terminal Size (mm)         | 6.4 x 0.8 mm / 4.7 x 0.5 mm |
| Voice Coil Diameter (mm)   | 25.81                       |
| Voice Coil Wire Material   | Copper clad aluminum        |
| Voice Coil Former Material | Kapton                      |
| Magnet Material            | Ferrite                     |
| Magnet Weight (g)          | 567                         |
| Cone Body Material         | Paper                       |
| Cone Surround Material     | Treated cloth               |





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| Spider Material   | Treated cloth |
|-------------------|---------------|
| Dust Cap Material | Paper         |
| Net Weight (kg)   | 1             |



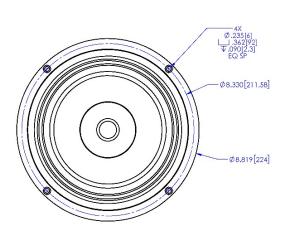


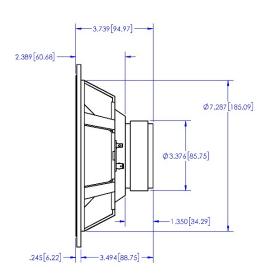




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