

This wide range midwoofer driver provides clear sound and robust bass in compact speaker systems. It features a lightweight, polypropylene cone with a high compliance, half-roll rubber surround impervious to water. This driver is ideal for use in a wide variety of applications, including medical equipment audio, home theater systems, alarms and security, automobiles and motorcycles, drive-thrus, arcade speakers, and more.

- Wide range speaker
- 2.25" x 4" (57 mm x 102 mm) basket diameter
- 10 watts, 6 ohms, 84 dB SPL
- 0.8" aluminum voice coil, polyimide film
- Neodymium ring magnet, stamped steel basket
- Polypropylene cone, rubber surround

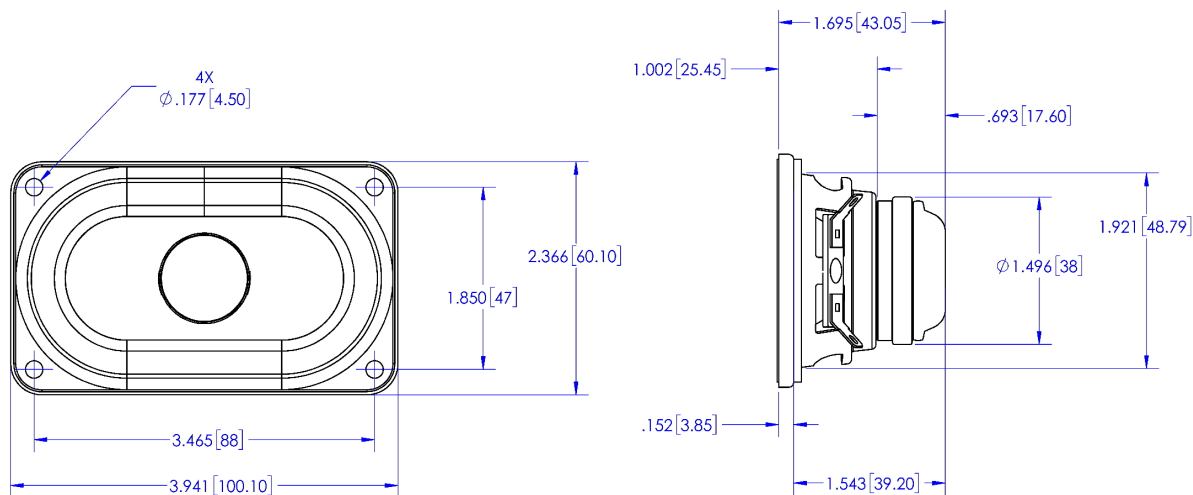
*Oaktron by MISCO* is the premium line of high performance, ready-to-ship transducers and drivers for a wide variety of applications including high fidelity, arcade, and casino games, automotive, aerospace and many more. From elegantly simple to highly specialized designs for unique and demanding applications, 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

|                                              |                 |
|----------------------------------------------|-----------------|
| <b>Size, Nominal (inch &amp; mm)</b>         | 2" Oval (50 mm) |
| <b>Rated Impedance (<math>\Omega</math>)</b> | 6               |
| <b>Continuous Power (W)</b>                  | 10              |
| <b>Sensitivity (dB SPL) <sup>1</sup></b>     | 84              |
| <b>Frequency Range (Hz)</b>                  | 100 - 10,000    |
| <b>Resonant Frequency (Fs) (Hz) +/- 15%</b>  | 130             |



## More Specifications

|                                                 |     |
|-------------------------------------------------|-----|
| <b>Application</b>                              |     |
| <b>RoHS Compliant</b>                           | Yes |
| <b>DC Resistance (Re) (<math>\Omega</math>)</b> | 6.1 |
| <b>Program Power (W)</b>                        | 20  |
| <b>Continuous Power (W)</b>                     | 10  |

## Small Signal Parameters

|                                                        |      |
|--------------------------------------------------------|------|
| <b>Nominal Impedance (Z) (<math>\Omega</math>)</b>     | 6    |
| <b>DC Resistance (Re) (<math>\Omega</math>)</b>        | 6.1  |
| <b>Voice Coil Inductance (Le) (mH)</b>                 | 0.21 |
| <b>Resonant Frequency (Fs) (Hz) +/- 15%</b>            | 130  |
| <b>Mechanical Q Factor (Qms)</b>                       | 6.42 |
| <b>Electrical Q Factor (Qes)</b>                       | 1.46 |
| <b>Total Q Factor (Qts)</b>                            | 1.19 |
| <b>Moving Mass (Mms) (gm)</b>                          | 3.1  |
| <b>Suspension Compliance (Cms) (mm/N)</b>              | 0.49 |
| <b>Mechanical Resistance (Rms) (kg/s)</b>              | 0.39 |
| <b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b> | 31.9 |
| <b>Compliance Equivalent Volume (Vas) (L)</b>          | 0.70 |
| <b>Maximum Linear Excursion (Xmax) (mm)</b>            | 2.45 |
| <b>Coil Winding Height (mm)</b>                        | 8.9  |
| <b>Magnetic Gap Height (mm)</b>                        | 4.0  |
| <b>Motor Force Factor (BL) (T•M)</b>                   | 3.2  |
| <b>Efficiency (<math>\eta_0</math>) (%)</b>            | 0.10 |
| <b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>     | 89.3 |

## Material Descriptions

|                                   |                                         |
|-----------------------------------|-----------------------------------------|
| <b>Basket Type</b>                | Stamped steel, black powder coat finish |
| <b>Terminal Size (mm)</b>         | 5.2 x 0.5 mm                            |
| <b>Voice Coil Diameter (mm)</b>   | 19.3                                    |
| <b>Voice Coil Wire Material</b>   | Copper clad aluminum                    |
| <b>Voice Coil Former Material</b> | Polyimide film                          |
| <b>Magnet Material</b>            | Neodymium ring magnet                   |
| <b>Cone Body Material</b>         | Polypropylene                           |
| <b>Cone Surround Material</b>     | Rubber                                  |

|                   |               |
|-------------------|---------------|
| Spider Material   | Cloth         |
| Dust Cap Material | Polypropylene |
| Net Weight (kg)   | 0.16          |



