MODEL #: 77X127-VB04-01

3 INCH X 5 INCH (77 MM X 127 MM) 4 OHM, WIDE RANGE SPEAKER

PART #: 93088

High intelligibility for your two-way radio system: The 93088 wide range speaker driver delivers the clear sound you need for any trusted communications application, sporting a design to emit strong voice fundamentals, and a high-energy neodymium magnet to produce powerful results. Fit this 3” x 5” driver into compact enclosures, thanks to a slim, oval shaped steel frame.

- Wide range speaker
- 3” x 5” (77 mm x 127 mm) basket diameter
- 15 watts, 4 ohms, 90 dB SPL
- 0.8" copper voice coil, aluminum former
- Neodymium 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)	3" Oval (77 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	15
Sensitivity (dB SPL) [1]	90
Frequency Range (Hz)	100 - 20, 000
Resonant Frequency (Fs) (Hz) +/- 15%	230

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More Specifications

Application	Voice Communications
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	3.1
Program Power (W)	30
Continuous Power (W)	15

Small Signal Parameters

Nominal Impedance (Z) (Ω)	4
DC Resistance (Re) (Ω)	3.1
Voice Coil Inductance (Le) (mH)	0.07
Resonant Frequency (Fs) (Hz) +/- 15%	230
Mechanical Q Factor (Qms)	3.09
Electrical Q Factor (Qes)	1.27
Total Q Factor (Qts)	0.9
Moving Mass (Mms) (gm)	3.4
Suspension Compliance (Cms) (mm/N)	0.14
Mechanical Resistance (Rms) (kg/s)	1.61
Surface Area of Diaphragm (Sd) (cm^2)	64.3
Compliance Equivalent Volume (Vas) (L)	0.81
Maximum Linear Excursion (Xmax) (mm)	1.00
Coil Winding Height (mm)	4.9
Magnetic Gap Height (mm)	2.78
Motor Force Factor (BL) (T•M)	3.5
Efficiency (η_0) (%)	0.75
Efficiency Bandwidth Product (EBP) (Fs/Qes)	181.7

Material Descriptions

Basket Type	Stamped steel
Terminal Size (mm)	Solder lugs
Voice Coil Diameter (mm)	19.38
Voice Coil Wire Material	Copper
Voice Coil Former Material	Aluminum
Magnet Material	Neodymium
Magnet Weight (g)	11.62
Cone Body Material	Paper
Cone Surround Material	Treated cloth

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Dust Cap Material	Paper





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