

Model No: NE65W-04  
Product Line: Vifa

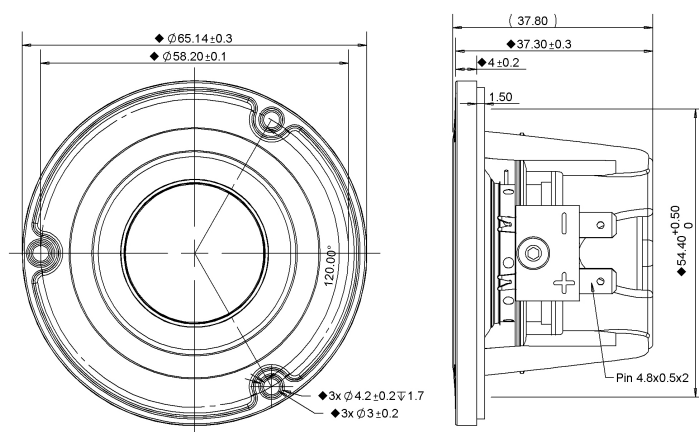
Rev: 3  
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## Product Description

This 2 inch 4 ohm member of the NE family has leading-edge transducer technology packaged in a cutting edge, stylistic design. The full-range drivers in this family feature an innovative cast aluminium basket design which minimizes acoustic reflections inside the driver, through large basket windows and sculpted basket spokes. The basket also is designed to act as a highly coupled heat sink to the Neodymium-Iron-Boron magnet (NdFeB) motor, so as to improve power handling capacity. The cone is aluminium, with a butyl rubber surround designed through finite element analysis for linearity of performance. The voice coil bobbin is titanium, for improved performance. The FEA-designed motor features copper caps to minimize inductance and extend performance to high frequencies.



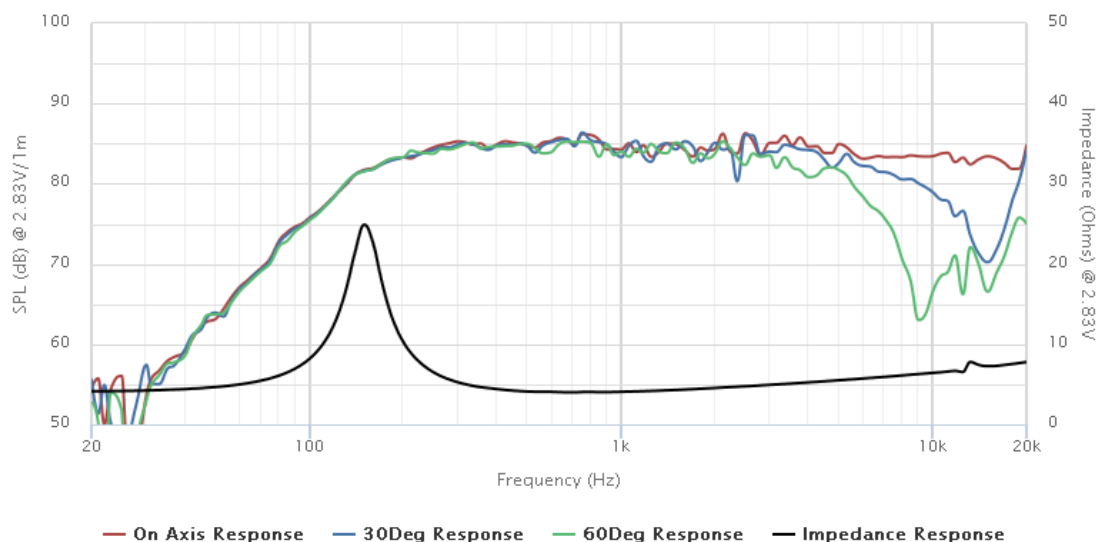
## Mechanical Drawing



## Specifications

|                               |             |        |        |           |                            |               |              |
|-------------------------------|-------------|--------|--------|-----------|----------------------------|---------------|--------------|
| DC Resistance                 | Revc        | Ohms   | 3.66   | 5.0%      | Energy Bandwidth Product   | EBP           | (1/Qes)*fs   |
| Minimum Impedance             | Zmin        | Ohms   | 4      | 7.5%      | Moving Mass                | Mms           | g            |
| Voice Coil Inductance         | Le          | mH     | 0.04   |           | Suspension Compliance      | Cms           | um/N         |
| Resonant Frequency            | Fs          | Hz     | 166.01 | 15%       | Effective Cone diameter    | D             | cm           |
| Mechanical Q Factor           | Qms         |        | 5.01   |           | Effective Piston Area      | Sd            | cm^2         |
| Electrical Q Factor           | Qes         | 0.74   |        |           | Effective Volume           | Vas           | L            |
| Total Q Factor                | Qts         |        | 0.65   |           | Motor Force Factor         | BL            | Tm           |
| Ratio Fs/Qts                  | F           | Fs/Qts | 256.98 |           | Motor Efficiency Factor    | $\beta$       | (T*M^2)/Ohms |
| Half Space Sensitivity @2.83V | db@2.83V/1M | dB     | 85.67  | +/- 1.0db | Voice coil former Material | VCfm          | TiSV         |
| Half Space Sensitivity @1W/1M | db@1W/1M    | dB     | 82.7   | +/- 1.0db | Voice coil inner diameter  | VCd           | mm           |
| Gap Height                    | Gh          | mm     | 3      |           | Rated Noise Power          | P             | W            |
| Maximum Linear Excursion      | Xmax        | mm     | 1.7    |           | Test Spectrum Bandwidth    | 150Hz - 18kHz |              |
| Ferrofluid Type               | FF          |        | N/A    |           | Transducer Size            | Inch          | 2 in         |
| Transducer Mass               | Kg          | 0.14   |        |           |                            |               |              |

## Frequency and Impedance Response



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