

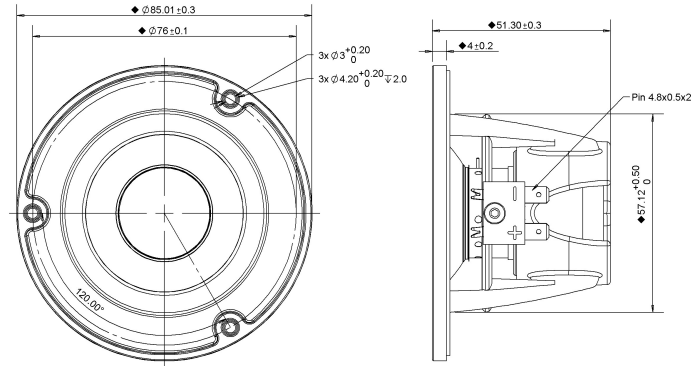
Full Range

This 2.5 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.



NE85W-04

MECHANICAL 2D DRAWING



SPECIFICATIONS

DC Resistance	Revc	Ω	3.65	±5.0%	Moving Mass	Mms	g	2.2
Minimum Impedance	Zmin	Ω	4.13	±7.5%	Suspension Compliance	Cms	um/N	1066.2
Voice Coil Inductance	Le	mH	0.06	-	Effective Cone Diameter	D	cm	5.31
Resonant Frequency	fs	Hz	104.94	15%	Effective Piston Area	Sd	cm2	22.3
Mechanical Q Factor	Qms	-	8.45	-	Equivalent Volume	Vas	L	0.73
Electrical Q Factor	Qes	-	0.69	-	Motor Force Factor	BL	T•m	2.75
Total Q Factor	Qts	-	0.64	-	Motor Efficiency Factor	β	(T•m2)/Ω	2.1
Ratio	fs/Qts	-	164.74	-	Voice Coil Former Material	VCfm	-	TISV
Half Space Sensitivity	dB@2.83V/1m	dB	84.81	±1.01	Voice Coil Inner Diameter	VCd	mm	25.73
Sensitivity	1W/1m	dB	81.9	±1.01	Gap Height	Gh	mm	4
Rated Noise Power (IEC 268-5 18.1)	P	W	25	-	Maximum Linear Excursion	Xmax	mm	1.8
Test Spectrum Bandwidth		12 dB/Oct	100Hz - 20kHz	-	Ferrofluid Type	FF	-	
Energy Bandwidth Product	EBP	(1/Qes)•fs		-	Transducer Size		-	2.5 in
				-	Transducer Mass		Kg	0.24

FREQUENCY & IMPEDANCE RESPONSE

