

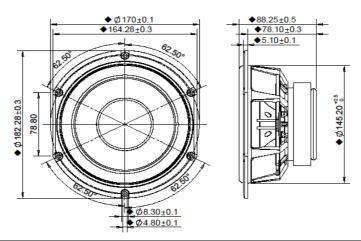
Model Number: P830990 Revision: rev 2_0
Description: Peerless HDS 6.5" GFP cone Date: 1-Sep-09



The new Peerless HDS product line continues the tradition of Peerless' High Definition Sound (HDS) products. A powerful ferrite magnet system is coupled to a finite element analysis designed suspension system, containing both a linear spider design and a rubber surround. The motor contains an aluminium shorting ring, which reduces coil inductance, thus providing both extended frequency response performance and reduced distortion. The long-throw voice coil ensures linear high excursion performance, needed for signal clarity. The cone necks are vented so as to reduce air compression effects under high excursion conditions. The cast aluminium basket offers structural rigidity, heat sinking capacity for the motor, and additional air venting under the spider so as to again reduce air compression effects. The cone in this model is glass-fibre composite (GFP) offering a unique visual and acoustic experience.



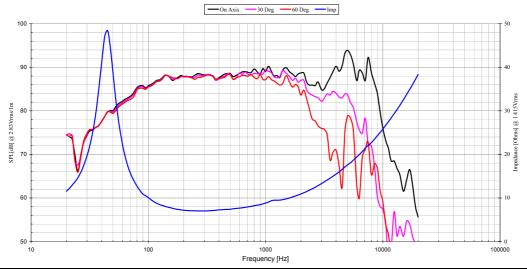
Mechanical 2D Drawing:



Specifications:

DC Resistance	R _{evc}	Ω	6.2	Energy Bandwidth Product	EBP	(1/Q _{es})·f _s	104
Minimum Impedance	Z_{min}	Ω	6.9	Moving Mass	M_{ms}	g	16.97
Voice Coil Inductance	L _e	mH	0.42	Suspension Compliance	C _{ms}	um/N	698.2
Resonant Frequency	f _s	Hz	46	Effective Cone Diameter	D	cm	13.5
Mechanical Q Factor	Q_{ms}	-	3.1	Effective Piston Area	S_D	cm ²	143.1
Electrical Q Factor	Q_{es}	-	0.44	Equivalent Volume	V_{as}	L	20.09
Total Q Factor	Q_{ts}	-	0.39	Motor Force Factor	BL	T·m	8.32
Ratio f _s / Q _{ts}	F	f_s / Q_{ts}	119	Motor Efficiency Factor	β	$(T \cdot m^2)/\Omega$	11.12
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	88.4	Voice Coil Former Material	VC_{fm}	-	ASV
Rated Noise Power (IEC 2685 18.1)	Р	W	50	Voice Coil Inner Diameter	VC _d	mm	32.4
Test Spectrum Bandwidth	20Hz - 3000Hz		12 dB/Oct	Maximum Linear Excursion	X_{max}	mm	5.34
				Transducer Mass	=	kg	1.582

Frequency and Impedance Response:



F088-0713A