



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Model No: PLS-50N25AL04-04  
 Product Line:

Rev 1  
 Last Update: 2017-01-05 14:20:43

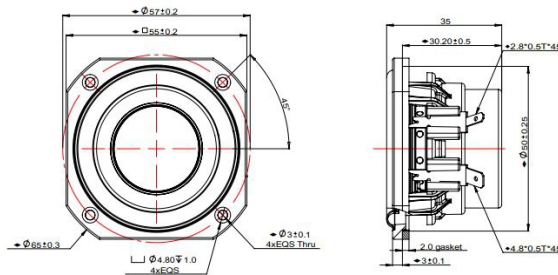
## Product Description

This 2 inch 4 ohm member of the PLS family sets a high standard for compact full range drivers intended for applications such as television soundbars and compact music systems. Design features in this family include a damped plastic basket with venting under the spider to aid cooling of the motor, a neodymium magnet motor with copper cap to lower coil inductance, providing low distortion at low frequencies and extended high frequency response. A black anodized aluminium cone is employed on the driver, along with a black anodized aluminium dust cap coupled directly to the voice coil. Additionally, the cones come equipped with special-designed large roll rubber surrounds, which allow for a dynamic linear response to high excursion input signals.

NOTE THIS DRIVER IS NOT APPROVED AND/OR IS NOT IN MASS PRODUCTION YET.  
 AS SUCH IT MAY BE SUBJECT TO CHANGE.  
 SPEC IS ONLY FOR INFORMATION.  
 PLEASE CHECK STATUS WITH THE ENGINEER



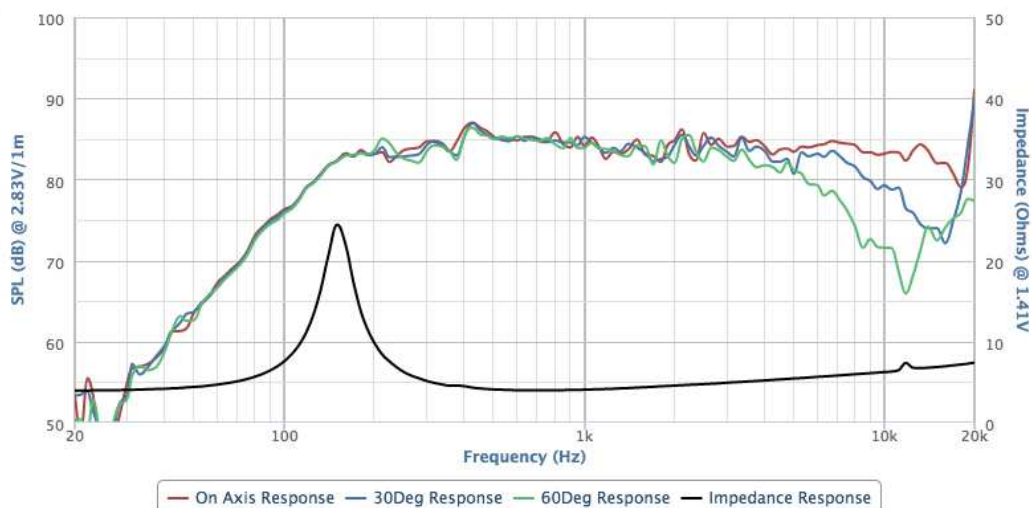
## Mechanical Drawing



## Specifications

DC Resistance	Revc	Ohms	3.6	5.0%	Energy Bandwidth Product	EBP	(1/Qes)*fs	216.3
Minimum Impedance	Zmin	Ohms	3.99	7.5%	Moving Mass	Mms	g	1.64
Voice Coil Inductance	Le	mH	0.03		Suspension Compliance	Cms	um/N	502.33
Resonant Frequency	Fs	Hz	175.63	15%	Effective Cone diameter	D	cm	4.4
Mechanical Q Factor	Qms		5.63		Effective Piston Area	Sd	cm <sup>2</sup>	15.21
Electrical Q Factor	Qes		0.81		Effective Volume	Vas	L	0.16
Total Q Factor	Qts		0.71		Motor Force Factor	BL	Tm	2.83
Ratio Fs/Qts	F	Fs/Qts	247.37		Motor Efficiency Factor	β	(T*M <sup>2</sup> )/Ohms	2.22
Half Space Sensitivity @2.83V	db@2.83V/1M	dB	84.99	+/- 1.0db	Voice coil former Material	VCfm		ASV
Half Space Sensitivity @1W/1M	db@1W/1M	dB	81.96	+/- 1.0db	Voice coil inner diameter	VCd	mm	25.73
Gap Height	Gh	mm	3		Rated Noise Power	P	W	25
Maximum Linear Excursion	Xmax	mm	1.65		Test Spectrum Bandwidth	150Hz - 20kHz		
Ferrofluid Type	FF				Transducer Size	Inch	2	
Transducer Mass	Kg	0.14						

## Frequency and Impedance Response



Highcharts.com