

Transducer Specification Sheet

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.

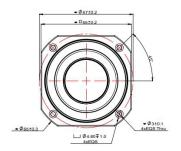
AS SUCH IT MAY BE SUBJECT TO CHANGE.

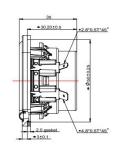
SPEC IS ONLY FOR INFORMATION.

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^2	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	ß	(T*M^2)/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	Р	W	25	
Maximum Linear Excursion	Xmax	mm	1.65		Test Spectrum Bandwidth	150Hz - 20kHz			
Ferrofluid Type	FF				Transducer Size	Inch	2		
Transducer Mass	Ka	0.14							

Frequency and Impedance Response

