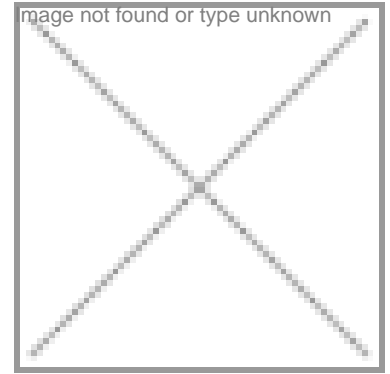


Model No.: PLS-50F25AL01-04
 Product Line: Tymphany

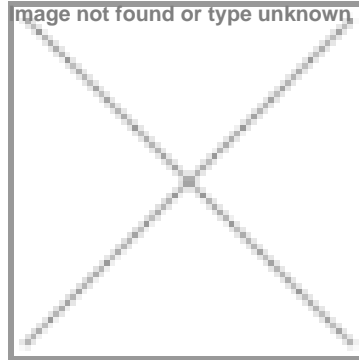
Rev: 1
 Last Update: 2017-04-25 21:32:09

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 stiff steel basket with venting under the spider to aid cooling of the motor, a ferrite 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, 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 at high excursion.



Mechanical Drawing



Specifications

| | | | | | | | | |
|-------------------------------|-------------|--------|--------|-----------|----------------------------|------|--------------|-------|
| DC Resistance | Revc | Ohms | 3.44 | 5.0% | Energy Bandwidth Product | EBP | (1/Qes)*fs | |
| Minimum Impedance | Zmin | Ohms | 4.42 | 7.5% | Moving Mass | Mms | g | 1.5 |
| Voice Coil Inductance | Le | mH | 0.03 | | Suspension Compliance | Cms | um/N | 576.3 |
| Resonant Frequency | Fs | Hz | 171.46 | 15% | Effective Cone diameter | D | cm | 4.4 |
| Mechanical Q Factor | Qms | | 5.1 | | Effective Piston Area | Sd | cm^2 | 15.2 |
| Electrical Q Factor | Qes | 0.89 | | | Effective Volume | Vas | L | 0.19 |
| Total Q Factor | Qts | 0.76 | | | Motor Force Factor | BL | Tm | 2.49 |
| Ratio Fs/Qts | F | Fs/Qts | 225.9 | | Motor Efficiency Factor | β | (T*M^2)/Ohms | 1.8 |
| Half Space Sensitivity @2.83V | db@2.83V/1M | dB | 84.13 | +/- 1.0db | Voice coil former Material | VCfm | | ASV |
| Half Space Sensitivity @1W/1M | db@1W/1M | dB | 81.6 | +/- 1.0db | Voice coil inner diameter | VCd | mm | 25.73 |
| Gap Height | Gh | mm | 2 | | Rated Noise Power | P | W | 7 |
| Maximum Linear Excursion | Xmax | mm | 2.2 | | Test Spectrum Bandwidth | | 150Hz~20KHz | |
| Ferrofluid Type | FF | | | | Driver Size | Inch | 2 in | |
| Driver Mass | Kg | 0.32 | | | | | | |

Frequency and Impedance Response

