

Ferrite Magnet Steel Chassis Driver



Specifications

General Specifications

Nominal diameter.....	305 mm/12 in
Power rating.....	100 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	97 dB
Frequency range.....	50-12000 Hz
Chassis type.....	Heavy Duty Stamp Steel
Magnet type.....	Ferrite
Magnet weight.....	1.2 kg/41.1 oz
Voice coil diameter.....	38.5 mm/1.5 in
Coil material.....	CCA-W
Former material.....	Kapton
Cone material.....	Paper
Surround material.....	Cloth
Suspension.....	Single
X-max.....	1.13 mm/0.04 in
Gap depth.....	8 mm/0.31 in
Voice coil winding width.....	10.25 mm/0.40 in
Net Weight.....	3.8 kg/8.4 lb
Packing Dimension WxDxH.....	325 x 325 x 170 mm
Shipping Weight.....	4.4 kg/9.7 lb

Small Signal Parameters

Re.....	6.8 Ω
Fs.....	54 Hz
Mms.....	41.65 g/1.47 oz
Mmd.....	35.01 g/1.23 oz
Qms.....	5.37
Qes.....	0.71
Qts.....	0.62
Vas.....	77.45 lt/2.74 ft ³
Bl.....	11.67 Tm
Cms.....	2.1e-04 m/N
Rms.....	2.63 Ns/m
Le (at 1kHz).....	0.29 mH
Sd.....	511 cm ²

Features

- 1.5" Voice Coil
- Extended Frequency Response
- Excellent Full Range Performance
- Precision Wound High Reliability Coil Design
- Computer Optimized Ferrite Magnet
- Heavy Gauge Steel Chassis Design

Applications

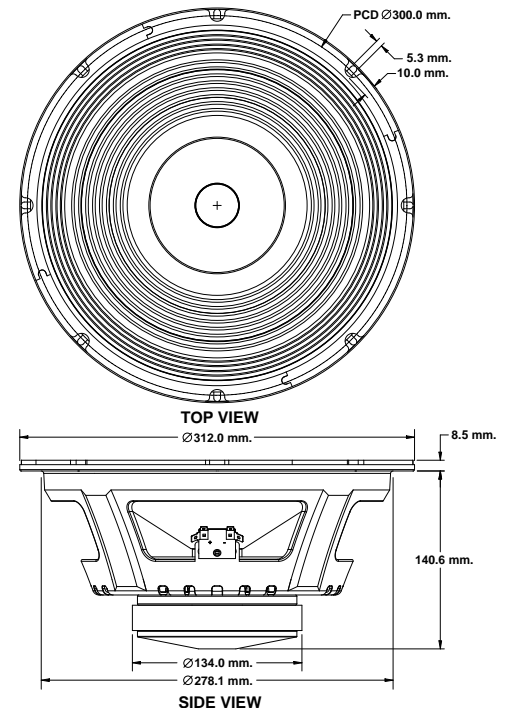
The P Audio E12-100F is a high output wide range transducer. The E12-100F is an upgraded design that features many of P Audio's new technologies and performance upgrades. The 12 inch (305mm) diameter piston will produce high sound pressure levels at low frequencies but also exhibits an extended high frequency response that makes the E12-100F a full range device. The operating bandwidth of the E12-100F is 50Hz to 12kHz. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio.

The E12-100F employs a medium format 1.5 inch (38.5mm) diameter voice coil that provides an AES rated 100 watts of continuous power handling and a full 400 watts of peak rated power handling when sufficient amplifier headroom is available. The E12-100F utilizes P Audio's under damper venting technology to improve transducer air flow and reduce turbulence under the damper and around the voice coil.

The voice coil design is a bobbin wound geometry with P Audio's precision round wire technology that maximizes system conversion efficiency and cooling.

The suspension has been designed specifically for high linear displacement and extended low frequency response.

The transducer chassis is a heavy gauge stamped steel design that insures a very high degree of structural integrity.



Frequency Response and Impedance Curves

