

Description

The SME300B100 is an imported pressed steel frame 12 driver for use in medium power musical instrument cabinets requiring a useful upper limit of 5KHz. This model offers high efficiency and wide frequency range permitting good performance to be achieved in an economical design.

The large voice coil diameter combined with a ribbed paper cone produce excellent mid-range efficiency.

This model features a large 155mm, 1420gm ferrite magnet. The low resonant frequency produces excellent low frequency performance in bass applications and the extended top end response and efficient upper mids add punch and clarity to enhance reproduction.

This driver features driver parameters that produce a full rich punchy bass in vented and sealed systems.

The ME300B100 is an economical driver with bright bass sound quality making it an excellent choice for vocal PA applications.



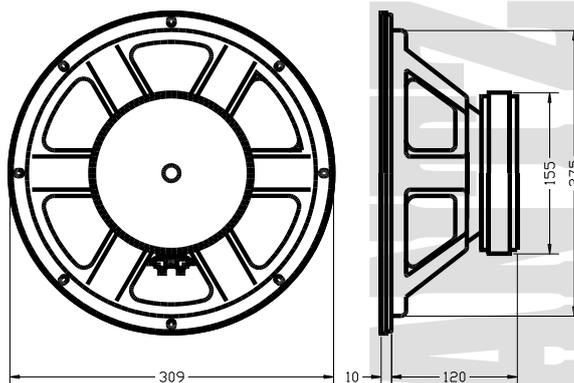
Application

General purpose musical instrument loudspeaker sound reinforcement applications in the frequency range 40Hz to 5kHz i.e. live music clubs, music playback systems for discos, public address systems and general audio reproduction applications.

We recommend vented enclosures of 25 to 60 litre capacity. In the correct enclosure and under controlled conditions we recommend each ME300B100 be driven by a power amplifier capable of delivering up to 100 watts into 8 ohms providing the bass input is processed to limit the diaphragm excursion to safe limits. Due to the high efficiency and limited linear excursion this model is best suited to low power musical instrument applications.

Refer: -ME300B100 application notes for enclosure details.

Mounting Details



Baffle opening diameter	
front mounting	275 mm
rear mounting	275 mm
Mounting pattern:	
eight 8 x 6 mm slots equi-spaced on a 292 mm	
PCD.	
Flange thickness	10 mm

*SAMMI Korean loudspeakers proudly distributed by
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Technical Data

Typical measured Thiele/Small parameters

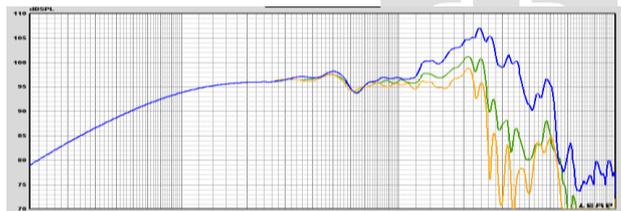
Maximum program power	=	200 watt
Rated nominal impedance	Z	= 8 ohms
Rated frequency range	=	40 - 5000 Hz
Piston sensitivity level	=	97.6 dB SPL
Resonance frequency	=	50 Hz
Mechanical Q	Qm	= 9.0
Electrical Q	Qe	= 0.32
Total spk. Q	Qts	= 0.31
Diaphragm mass	Mmd	= 30.5 gms
Effective diaphragm diameter	D	= 25.3 cm
Effective diaphragm area	Sd	= .050 sq.m.
Vol. equiv to spk compliance	Vas	= 95.6 litres
Mechanical compliance	Cms	= 0.28 mm/N
BL product	Bl	= 15.2 T.m.
Voicecoil diameter	d	= 51 mm
Voicecoil material	=	copper
Voicecoil DC resistance	Re	= 6.5 ohms
Voicecoil inductance	Lvc	= 0.6 mH
Voicecoil height	=	8.5 mm
Height of air-gap	Hg	= 7 mm
Peak linear displacement	Xpk	= 2.2 mm
Reference efficiency	=	3.5 %
Speaker total mass	=	4750 gms

Specifications subject to change without notice.

Notes

- (1) Rated power is assigned by the manufacturer.
- (2) Reference sensitivity is SPL at 1W at 1m derived from Thiele/Small parameters.
- (3) Frequency range is the useful frequency range for this transducer when mounted in its recommended enclosure.
- (4) Thiele/Small parameters are derived after the test speaker has been preconditioned.
- (5) Peak linear displacement Xpk derived from Klippel XBL measurement at 82%.

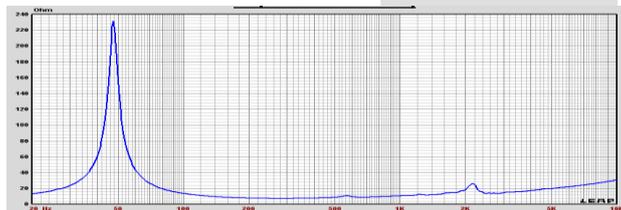
Frequency Response



Infinite baffle sound pressure response recorded at 2.83V or nominal one watt at one meter.

- Blue curve is on axis spl response
- Green curve is SPL at 30 degrees off axis.
- Orange curve is SPL at 40 degrees off axis

Impedance plot



Free-air impedance magnitude plot.