

15MB650 Very High Output Mid-Bass Driver

0221545240 4 ohm
0221585240 8 ohm

18
EIGHTEEN
SOUND



Key features

- 101,5dB SPL 1W / 1m average sensitivity
- 75mm (3") interleaved sandwich voice coil (ISV)
- 400 W continuous pink noise
- Excellent transient response and cone damping
- Ideal for compact two way system, in multiway systems and horn design
- Improved heat dissipation via unique basket design.

GENERAL SPECIFICATIONS

NOMINAL DIAMETER	380 mm	(15 in)
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE	400 W	(1)
CONT. POWER	300 W	(2)
PROGRAM POWER	600 W	(3)
PEAK POWER	1200 W	(4)
SENSITIVITY	101,5 dB	(5)
FREQUENCY RANGE	50 - 4800 Hz	(6)
POWER COMPRESSION		(7)
@-10 dB (30 W)	0,7 dB	
@-3 dB (150 W)	2 dB	
@FULL POWER (300 W)	3,6 dB	
MAX RECOMM. FREQUENCY	2000 Hz	
RECOMM. ENCLOSURE VOLUME	70 - 150 lt.	(2,47 - 5,3 cuft)
MINIMUM IMPEDANCE	6,6 Ohms at 25 deg.	
MAX EXCURSION PEAK TO PEAK	20 mm	(0,79 in)
VOICE COIL DIAMETER	75 mm	(2,95 in)
VOICE COIL WINDING MATERIAL	copper	

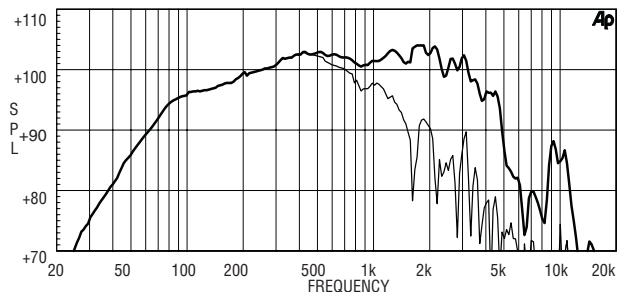
THIELE-SMALL PARAMETERS (8)

Fs	40 Hz	
Re	5,5 ohms	
Sd	0,085 sq.mt.	(131,75 sq.in.)
Qms	3,95	
Qes	0,27	
Qts	0,26	
Vas	210 lt.	(7,42 cuft)
Mms	77 gr.	(0,17 lb)
BL	20 Tm	
Linear Mathematical Xmax	± 4 mm	(± 0,16 in) (9)
Le(1kHz)	1,36 mH	
Ref. Efficiency		
dB / 1W / 1m (half space)	98,9 dB	

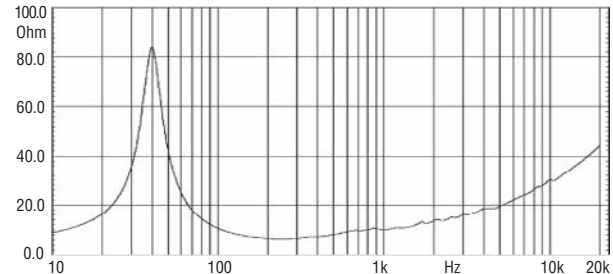
MOUNTING INFORMATION

Overall diameter	387 mm	(15,23 in)
N. of mounting holes	8	
Mounting holes diameter	7,15 mm	(0,28 in)
Bolt circle diameter	370-371 mm	(14,55 - 14,6 in)
Front mount baffle cutout diameter	353 mm	(13,90 in)
Rear mount baffle cutout diameter	357 mm	(14,06 in)
Total depth	168 mm	(6,61 in)
Flange and gasket thickness	19 mm	(0,75 in)
Net weight	8,4 kg	(18,54 lb)
Shipping weight	9,5 kg	(20,97 lb)
CardBoard packing dimensions	405 x 405 x 214 mm	(15,94 x 15,94 x 8,43 in)

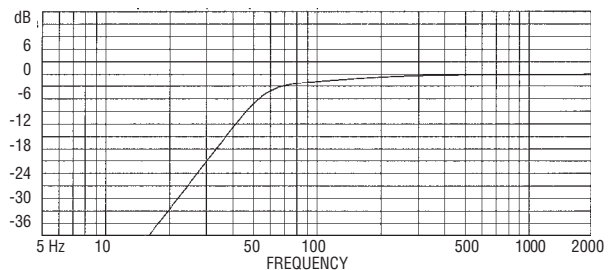
FREQUENCY RESPONSE CURVE OF 15MB650 MADE ON 125 Lt. ENCLOSURE TUNED 50Hz IN FREE FIELD (4pi) ENVIRONMENT, ENCLOSURE CLOSE THE REAR OF THE DRIVER . THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NORMALIZED AMPLITUDE RESPONSE (dB/Hz)



Box Parameters

Custom Vented Box

Vb	= 75,00 Lt.	Fill	= normal
Fb	= 52.2 Hz	Dv	= 16,00 cm
QL	= 7.0	Lv	= 13,63 cm

(1) AES standard

(2) Continuous power rating is measured in 125 lit enclosure tuned 50Hz using a 40 - 400Hz band limited pink noise test signal applied continuously for 2 hours.

(3) *Program power rating is measured as for "2" above but 50% duty cycle ."

(4) The peak power rating is based on a 6dB crest factor above the continuous power rating and represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.

(5) Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone , at distance 1m from the baffle panel, when connected to 2,83 v sine wave test signal swept

between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for 2 above.

(6) Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.

(7) Power compression represents the loss of sensitivity for the specified power, measured from 50-500 Hz, after a 5 min pink noise preconditioning test at the specified power.

(8) Thiele - small parameters are measured after the test specimen has been conditioned by 400 W AES power and represent the expected long term parameters after a short period of use .

(9) Linear Mat. Xmax is calculated as: (Hvc-Hg)/2 + Hg/4 where Hvc is the coil depth and Hg is gap depth.