12W500

Low Frequency Driver

0221284310 8 ohm
0221244310 4 ohm

Key features

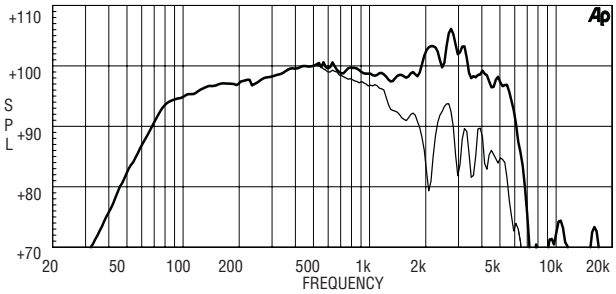
- 99,5dB SPL 1W / 1m average sensitivity
- 65mm (2,5") interleaved sandwich voice coil (ISV)
- 350 W continuous pink noise
- Excellent transient response
- Ideal for compact two way systems
- Improved heat dissipation via unique basket design.

GENERAL SPECIFICATIONS		
NOMINAL DIAMETER	300mm	(12 in)
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE	350 W	(1)
CONT. POWER	250 W	(2)
PROGRAM POWER	500 W	(3)
PEAK POWER	1000 W	(4)
SENSITIVITY	99.5 dB	(5)
FREQUENCY RANGE	50 - 6000 Hz	(6)
POWER COMPRESSION		(7)
@-10 dB (25 W)	0,7 dB	
@-3 dB (125 W)	2,5 dB	
@FULL POWER (250 W)	4,0 dB	
MAX RECOMM. FREQUENCY	2500 Hz	
RECOMM. ENCLOSURE VOLUME	50 - 100 lt.	(1,77 - 3,53 cuft)
MINIMUM IMPEDANCE	6,4 ohms at 25 deg.	
MAX EXCURSION PEAK TO PEAK	22 mm	(0,87 in)
VOICE COIL DIAMETER	64 mm	(2,52 in)
VOICE COIL WINDING MATERIAL	aluminum	

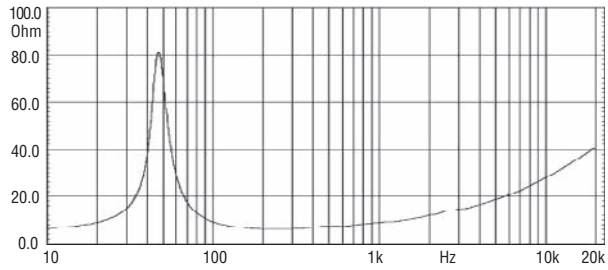
THIELE-SMALL PARAMETERS	(8)	
Fs	46 Hz	
Re	5,2 ohms	
Sd	0,0531 sq.mt.	(82,31 sq.in.)
Qms	6,02	
Qes	0,38	
Qts	0,36	
Vas	123 lt.	(4,34 cuft)
Mms	36,5 gr.	(0,08 lb)
BL	12,1 Tm	
Linear Mathematical Xmax	± 4 mm	(± 0,16 in) (9)
Le (1kHz)	1,12 mH	
Ref. Efficiency dB / 1W / 1m (half space)	97,2 dB	

MOUNTING INFORMATIONS		
Overall diameter	315 mm	(12,4 in)
N. of mounting holes	8	
Mounting holes diameter	7,15 mm	(0,28 in)
Bolt circle diameter	296 - 300 mm	(11,65 - 11,8 in)
Front mount baffle cutout diameter	282 mm	(11,1 in)
Back mount baffle cutout diameter	282 mm	(11,1 in)
Total depth	141 mm	(5,55 in)
Flange and gasket thickness	16,5 mm	(0,65 in)
Net weight	4,5 kg	(9,93 lb)
Shipping weight	5,3 kg	(11,7 lb)
CardBoard packing dimensions	332 x 332 x 184 mm (13,07 x 13,07 x 7,24 in)	

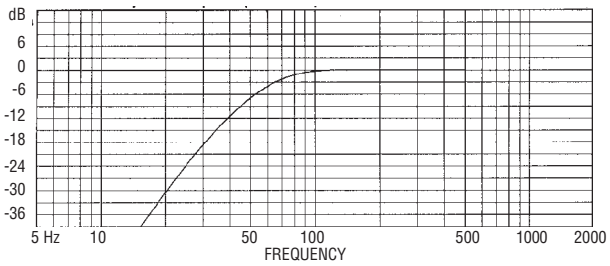
FREQUENCY RESPONSE CURVE OF 12W500 MADE ON 50 Lit. ENCLOSURE TUNED 60Hz IN FREE FIELD (4pi) ENVIROMENT. ENCLOSURE CLOSE THE REAR OF THE DRIVER . THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NORMALIZED AMPLITUDE RESPONSE (dB/Hz)



Box Parameters
Custom Vented Box

Vb	= 55,00 Lt.	**Fill**	= normal
Fb	= 50.0 Hz	**Dv**	= 12,50 cm
QL	= 7.0	**Lv**	= 15,40 cm

(1) AES standard
(2) Continuous power rating is measured in 50 lit enclosure tuned 60Hz using a 55 -2500Hz 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 whituout 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 enviroment.
(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 350 W AES power and represent the expected long term parameters after ashort 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.