

AUDAX

LA PASSION DU HAUT-PARLEUR

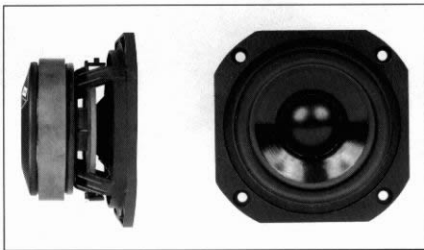
HM100G0**BASS MIDRANGE**

100836R

4" - PAPER CONE - 100 mm**REFERENCE SERIES**

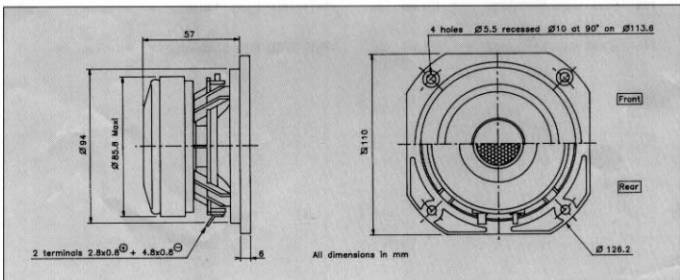
Non resonant die cast chassis
 Ventilated chassis under spider
 Critically damped paper cone
 High Loss high compliance rubber Surround
 Edgewound, flat copper wire
 Kapton voice coil former
 Vented pole piece with protection grill
 Gold plated terminals

Châssis Zamak moulé - Fond ventilé
 Cône papier traitement amortissant
 Suspension caoutchouc amortissant
 haute compliance
 Bobine sur support Kapton
 Fil cuivre plat sur chant
 Noyau ventilé avec grille de protection
 Connectique plaquée or



Designed for high end compact 2 way and satellite systems, this 4" Bass-Midrange driver offers the ultimate in paper cone technology. It features a state of the art curvilinear cone which is critically damped with a visco elastic compound and is coupled to a high loss rubber surround. Special consideration has been taken to ensure the best possible linear response, and an exceptionally natural top end roll-off. Unobstructed venting of the Zamak die cast chassis, coupled with a grill protected, vented pole piece and a soft polymer dustcap all contribute to the dramatic transient response. High power handling results from the flat, edgewound copper coil mounted onto a fiberglass reinforced Kapton voice coil former. Gold plated terminals offer excellent solderability. The "suggested applications" charts indicate various driver loads. The response curves shown on the diagram indicate the predicted low end response of the driver in the suggested box volume (Vb) with suggested port (Dp-Lp).

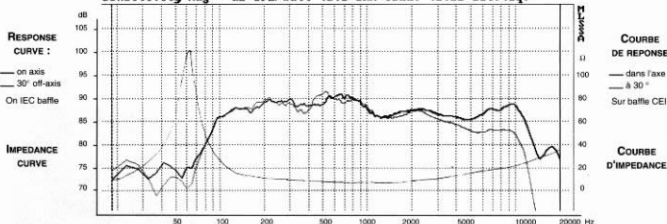
Ce Boomer-Médium de 100 mm destiné à des systèmes haut de gamme compacts 2 voies et satellites constitue l'aboutissement de la technologie du cône en pulpe de cellulose par l'utilisation d'un cône en papier à profil curviligne traité par un matériau visco-élastique amortissant associé à une suspension en caoutchouc haute compliance. Un soin particulier a été apporté au châssis Zamak moulé ainsi qu'à la structure magnétique afin d'assurer la meilleure réponse en transitoire ainsi qu'une coupure haute naturelle : châssis ouvert et ventilé sous le spider, noyau ventilé et cache noyau en polymère souple ultra léger. Sa bonne tenue en puissance résulte de l'utilisation d'une bobine sur support Kapton renforcé fibre de verre en fil de cuivre plat sur chant. La connectique plaquée or permet une excellente soudabilité. Le tableau "Suggested applications" indique différents types de charge. Les courbes publiées correspondent à la réponse dans le grave pour un volume (Vb) et une dimension d'évent donnée (Dp-Lp).



RESPONSE CURVE

refer to page 16

Sensitivity Mag - dB SPL/watt (8.8 ohm load) (0.33 oct)(eq)



SPECIFICATIONS

Technical Characteristics	Symbol	Value	Units
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PRIMARY APPLICATION

Nominal Impedance	Z	8	Ω
Resonance Frequency	Fs	55	Hz
Nominal Power Handling	P	40	W
Sensitivity	E	89	dB

VOICE COIL

Voice coil diameter	ϕ	25	mm
Minimum Impedance	Zmin	7.7	Ω
DC Resistance	Re	6.4	Ω
Voice Coil Inductance	Lbm	0.33	mH
Voice coil Length	h	9.2	mm
Former	-	Kapton	-
Number of layers	n	1	-

MAGNET

Magnet dimensions	$\phi \times h$	84 x 15	mm
Magnet weight	m	0.345	kg
Flux density	B	1.1	T
Force factor	BL	6.37	NA ¹
Height of magnetic gap	He	5	mm
Stray flux	Fmag	-	Am ¹
Linear excursion	Xmax	± 2.1	mm

PARAMETERS

Suspension Compliance	Cms	$1.65 \cdot 10^{-1}$	mN ¹
Mechanical Q Factor	Qms	3.34	-
Electrical Q Factor	Qes	0.27	-
Total Q Factor	Qts	0.25	-
Mechanical Resistance	Rms	0.52	kg s ⁻¹
Moving Mass	Mms	$5.10 \cdot 10^{-1}$	kg
Effective Piston Area	S	$0.51 \cdot 10^{-2}$	m ²
Volume Equivalent of Air at Cas	Vas	$6.2 \cdot 10^{-1}$	m ³
Mass of speaker	M	0.94	kg

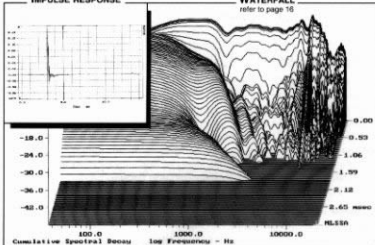
APPLICATION PARAMETERS

Vb	Box volume	dm ³
Fb	Tuning frequency	Hz
Dp	Port diameter	cm
Lp	Port length	cm

IMPULSE RESPONSE

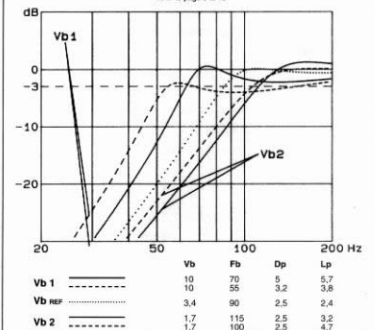
WATERFALL

refer to page 16



SUGGESTED APPLICATIONS

refer to page 8 to 13



Please refer to method of measurement and measurement conditions pages 15 to 19.

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