

12" - PAPER CONE DRIVER - 300 mm4 Ω **CAR LINE**

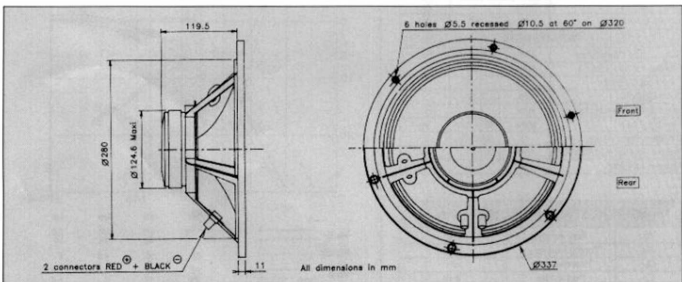
Hi Fi automotive application
 Zamak die cast chassis
 Exponential paper cone
 Coated textile suspension
 Kapton voice coil former (48 mm \varnothing)
 Flat copper wire
 Gold plated binding posts

Application hi fi automobile
 Châssis Zamak moulé
 Cône papier profil exponentiel
 Suspension toile traitée
 Bobine sur support Kapton (\varnothing 48 mm)
 Fil cuivre plat sur chant
 Bornes plaquées or



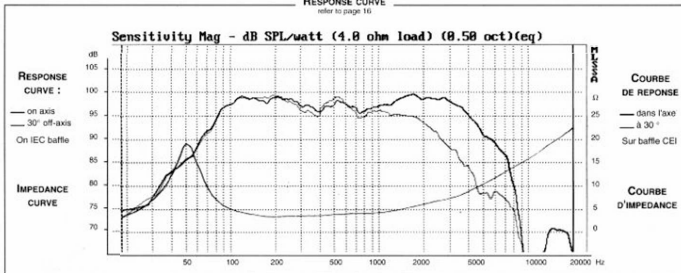
This 12", designed for high quality multiway automotive application (4 Ω) offers a combination of high sensitivity (97 dB), high power handling with edgewound flat copper wire mounted onto a fiberglass reinforced Kapton former and extended frequency range from the exponential cone profile. The gold plated binding posts fitted onto the Zamak die cast chassis offer the possibility of using large diameter cables. The "suggested applications" charts indicate various driver loads, including the box alignment used to measure the response curve (V_b REF). The response curves shown on the diagram indicate the predicted low end response of the driver in the suggested box volume (V_b) with suggested port (Dp-Lp).

Ce haut-parleur de 300 mm est destiné à une utilisation en haute fidélité automobile en systèmes multivoies (4 Ω), il bénéficie d'une tenue en puissance élevée due à sa bobine sur support Kapton renforcé fibre de verre à fil de cuivre plat sur chant, d'un rendement élevé (97 dB) et d'une membrane à profil exponentiel permettant une réponse étendue vers le haut du spectre. Le châssis Zamak moulé est équipé de borniers plaqués or permettant l'utilisation de câbles de forte section. Le tableau "Suggested applications" indique différents types de charge dont celui utilisé pour la mesure de la courbe de réponse (V_b). Les courbes publiées correspondent à la réponse dans le grave pour un volume (V_b) et une dimension d'évent donnée (Dp-Lp).



RESPONSE CURVE

refer to page 16



SPECIFICATIONS

Technical Characteristics	Symbol	Value	Units
---------------------------	--------	-------	-------

PRIMARY APPLICATION

Nominal Impedance	Z	4	Ω
Resonance Frequency	Fs	51	Hz
Nominal Power Handling	P	100	W
Sensitivity	E	97	dB

VOICE COIL

Voice coil diameter	\varnothing	48	mm
Minimum Impedance	Zmin	4,3	Ω
DC Resistance	Re	3,3	Ω
Voice Coil Inductance	Lbm	0,32	mH
Voice coil Length	h	10	mm
Fomer	-	Kapton	-
Number of layers	n	1	-

MAGNET

Magnet dimensions	\varnothing x h	120 x 20	mm
Magnet weight	m	0,88	kg
Flux density	B	1	T
Force factor	BL	8,76	NA ¹
Height of magnetic gap	He	6	mm
Stray flux	Fmag	-	Am ¹
Linear excursion	Xmax	± 2	mm

PARAMETERS

Suspension Compliance	Cms	$0,23 \cdot 10^{-3}$	mN ¹
Mechanical Q Factor	Qms	3,89	-
Electrical Q Factor	Qes	0,57	-
Total Q Factor	Qts	0,50	-
Mechanical Resistance	Rms	3,4	kg s ⁻¹
Moving Mass	Mms	$41,34 \cdot 10^{-3}$	kg
Effective Piston Area	S	$5,4 \cdot 10^{-2}$	m ²
Volume Equivalent of Air at Cas	Vas	$97 \cdot 10^{-3}$	m ³
Mass of speaker	M	3,2	kg

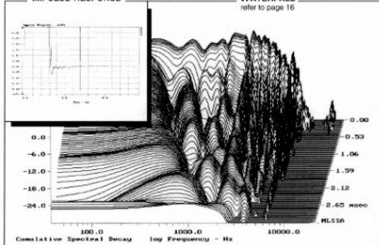
APPLICATION PARAMETERS

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

IMPULSE RESPONSE

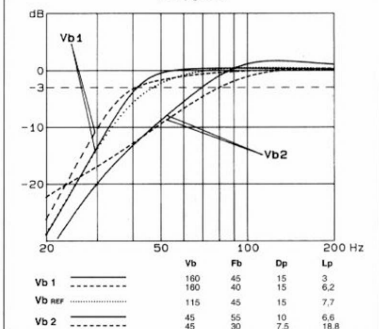
WATERFALL

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.

Audax may, without prior notification modify the specifications on its products further to research and development requirements.