AUDAX

LA PASSION DU HAUT-PARLEUR

TM010A1

TWEETER

101175A

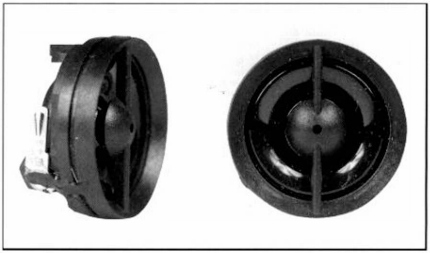
MICRO 10 mm NEODYMIUM POLYMER DOME

4 Ω

CAR LINE

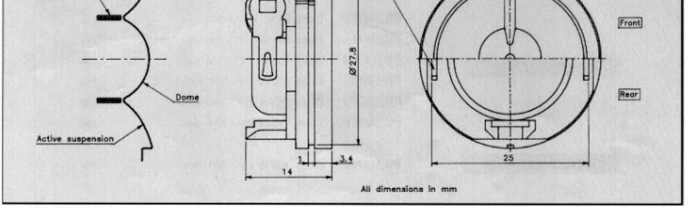
Ultra compact (ø 29,5mm)
Ultra-light weight (10g)
Balanced drive concept design*
Ferrofluid - cooled voice coil
Extended frequency response
Ultra-light moving parts
Encapsulated neodymium magnet

Ultra compact (ø 29,5mm)
Ultra léger (10g)
Concept balanced drive*
Bobine refroidie par ferrofluide
Bande passante étendue
Equipage mobile ultra léger
Aimant néodyme surmoulé



Keeping the performance of the well-known Audax 10 mm tweeters while reducing size to the extreme can be quite a challenge. It is however achieved with the new Micro 10 tweeter, a combination of proven Audax know-how and latest technologies : high precision magnet system, rare earth magnet(neodymium-iron-boron), ultra light moving parts with formerless voice coil piston area equally divided between dome and active suspension("balanced drive" concept). Its amazing size (<10cc) and weight (10 g) without compromise on performance make it an ideal choice for a growing number of applications where these factors are essential : automotive, multimedias, telecommunications, HDTV and home theatres. A specific housing has been designed to accomodate the basic tweeter for easy surface mounting into any desired place of an automotive environment. Both acoustic and cosmetic parameters have been considered in the design (refer to page 265). Easily coupled with 1st order crossover as shown in Fig. 1 or with 2nd order for increased power handling.

Aboutissement d'une miniaturisation poussée, tout en conservant les performances de tweeters 5 fois plus lourds, ce tweeter à dôme de 10 mm bénéficie des technologies les plus récentes : usinage de précision du système magnétique, aimant terres rares(néodyme-fer-bore). Il doit l'extrême légèreté de son équipage mobile à sa bobine sans support. La surface émissive est équilibrée entre le dôme et la suspension active, son extrême compacité (<10cm³) et son poids plume (10 g) en font un "must" pour les applications de plus en plus nombreuses où encombrement et poids sont des facteurs déterminants : automobile, système multimédia, télécommunications, TVHD, haute fidélité compacte. Un boitier a été conçu spécialement pour une implantation aisée dans tout environnement automobile (voir page 265). L'ensemble, équipé d'une grille de protection offre les caractéristiques d'une installation haut de gamme. Il peut être filtré au premier ordre comme proposé sur le schéma Fig. 1 ou au 2ème ordre pour une augmentation de la tenue en puissance.



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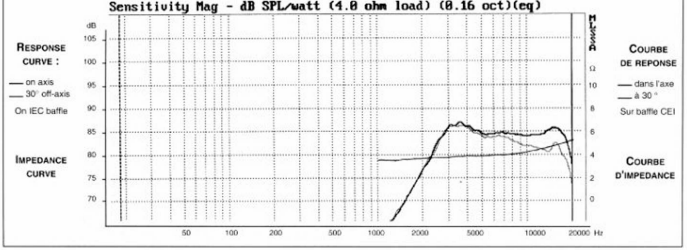
TWEETER

RESPONSE CURVE
refer to page 16

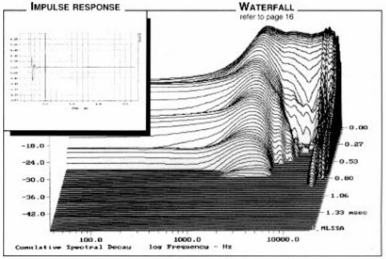


SPECIFICATIONS

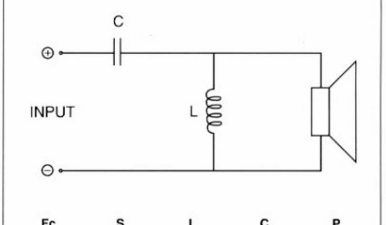
Technical Characteristics	Symbol	Value	Units
PRIMARY APPLICATION			
Nominal Impedance	Z	4	Ω
Resonance Frequency	Fs	3000	Hz
Nominal Power Handling	P	25	W
Sensitivity	E	85	dB
VOICE COIL			
Voice coil diameter	Ø	10	mm
Minimum Impedance	Zmin	4,3	Ω
DC Resistance	Re	3,4	Ω
Voice Coil Inductance	Lbm	0,25	µH
Voice coil Length	h	2	mm
Former	-	-	-
Number of layers	n	2	-
MAGNET			
Magnet dimensions	Ø x h	9,5 X 2	mm
Magnet weight	m	-	kg
Flux density	B	1	T
Force factor	BL	1	NA^{-1}
Height of magnetic gap	He	2	mm
Stray flux	Fmag	1,2	Am^{-1}
Linear excursion	Xmax	±0,25	mm
PARAMETERS			
Suspension Compliance	Cms	-	mN^{-1}
Mechanical Q Factor	Qms	-	-
Electrical Q Factor	Qes	-	-
Total Q Factor	Qts	-	-
Mechanical Resistance	Rms	-	$kg\,s^{-1}$
Moving Mass	Mms	$0,13.10^{-3}$	kg
Effective Piston Area	S	$3,14.10^{-4}$	m^2
Volume Equivalent of Air at Cas	Vas	-	m^3
Mass of speaker	M	0,01	kg

IMPULSE RESPONSE

WATERFALL
refer to page 16



SUGGESTED APPLICATIONS
refer to page 8 to 13



APPLICATION PARAMETERS

Fc	Crossover Frequency	Hz
S	Slope	dB / Oct.
L	Self-inductance	mH
C	Capacitor	µF
P	Nominal Power Handling	W

Fc	S	L	C	P
6000	6	none	6	25
6000	12	0,12	5	45

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