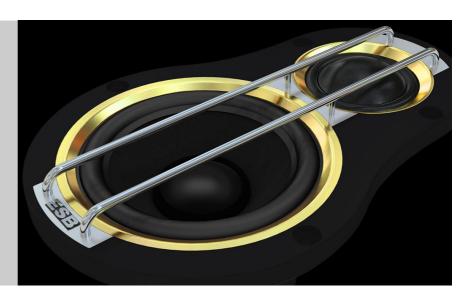


8003 UMA

1.1"/28 MM SOFT DOME TWEETER + 3"/75 MM CONE MIDRANGE

28 mm aluminum voice coil (tweeter)
25 mm aluminum voice coil (midrange)
High-grade neodymium magnet
Torcon® soft dome (tweeter)
Non-pressed cellulose cone (midrange)
CNC avional faceplate
Ferrofluid cooling and damping
Acoustic resistance Qts control
Computer optimized design
Motor metal parts CNC machined
Under-dome dB Cloth® damping material
Aluminium midrange dust cup



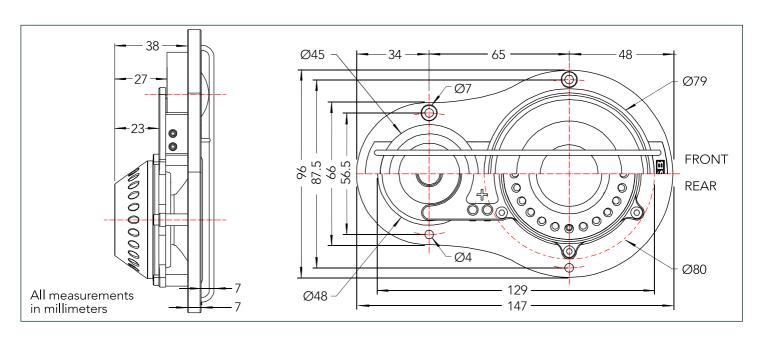
This special and exclusive component driver is a concept born way back in 70's, its aim is to concentrate midrange and tweeter emissions in a virtual single point. This minimizes phase delays and irregularities at the crossover point. All the parts that make up this component have been made with the CNC process. This is very expensive and time consuming, but ensures perfect geometry and impeccable aesthetics. A mix of precious materials such as brass, stainless steel and Avional aluminum are used together for a unique product.

Each component uses a very large, vented neodymium motor magnet, optimized with computer simulations (FEA) to obtain a greater efficiency and improve linearity along all voice coil's excursion. The neodymium magnet is a high-grade type to eliminate magnetic loss at elevated temperature and concentrate more force in less space.

The tweeter uses a Torcon® soft dome, an exclusive Polyphenylene Sulfide (PPS) with a high performance fiber that offers superb heat resistance, low weight and excellent self-damping, to get a free resonance frequency response outside the audible frequency range.

The midrange's non-pressed cellulose pulp exponential cone, with a Vinylester resin coating, ensures a perfect balance between rigidity, weight, and self-damping. The cellulose pulp guarantees an extremely natural and linear reproduction, with an excellent extension at high frequencies.

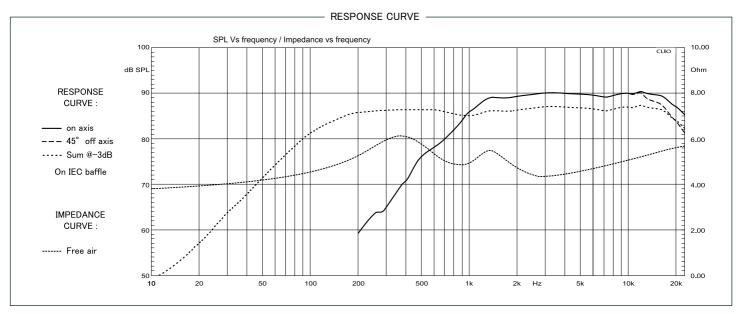
Great attention was given to the ventilation of the two components, through a single axial ventilation on the tweeter and multiple on the midrange. To improve control and damping an acoustic resistance has been adopted on both components. Combined, the two components are able to reproduce with perfect linearity all the spectrum from 95 Hz to 25 KHz.



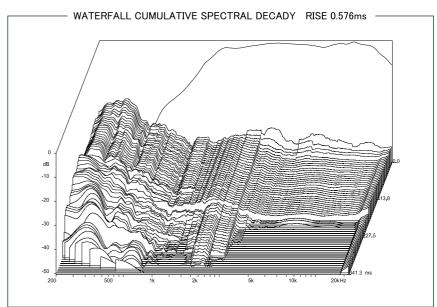


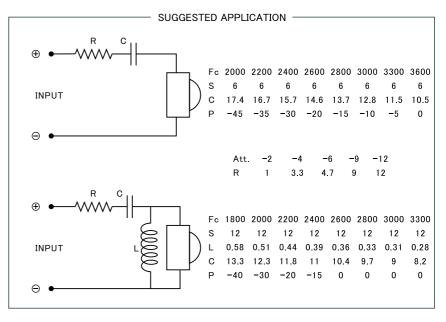
ESB

1.1"/28 MM SOFT DOME TWEETER



SPECIFICATIONS							
Technica	l Characteristics	Symbol	Value	Units			
GENERAL DATA							
Overall D	Overall Dimension		96 x 147	mm			
Nominal Po	ower Handling (AES)*	Р	110	W			
Transient	Power *	Pp	220	W			
Sensivity	IW/1m	SPL	91	dB SPL			
Frequency	Frequency Response		940 - 25.000				
Net Weight		538 (uma)		g			
Dome Material		Torcon ®					
*Nominal	*Nominal and Transient power @ High Pass 2.6KHz-12db/Oct						
	ELECTR	ICAL DATA	4				
Nominal I	mpedance	Z	4	Ω			
DC Resis	tance	Re	3.4	Ω			
Voice coi	Voice coil Inductance		0.0517	μH			
V	VOICE COIL AND MAGNET PARAMETERS						
Voice Coil Diameter		Dia	28	mm			
Voice coi	Voice coil Height		2.5	mm			
Number of layers		n	2				
Voice Co	Voice Coil Former		Aluminum				
Magnet S	ystem	Neodymium Vented					
Magnetic	Magnetic Gap Height		3	mm			
Max Linea	Max Linear excursion		±0.5	mm			
Flux dens	Flux density		1.3	Т			
BL Produ	BL Product		4.35	Na			
Magnet d	Magnet dimension		27 x 6	mm			
Magnet weight		m	25.7	g			
	T&S PAI	RAMETERS	3				
Mechanic	al Q Factor	Qms	0.744				
Electrica	I Q Factor	Qes	0.928				
Total Q F	Total Q Factor		0.4	113			
Suspensi	Suspension Compilance		0.38	N/m			
Mechanic	Mechanical Resistance		1.54	Ω			
Moving M	Moving Mass		0.72	g			
Eq. Comp	o. Air Load	VAS	0.012	ı			
Resonand	Resonance Frequency		540	Hz			
Effective	Effective Piston Area		8.49	cm²			
	CROSSO	VER VALU	E				
Fc	Crossover frequency			Hz			
L	Inductor		mΗ				
С	Capacitor		μF				
R	Resistance			Ω			
Р	Reduction from Nominal Power			%			
S Crossover Slope			dB/Oct				

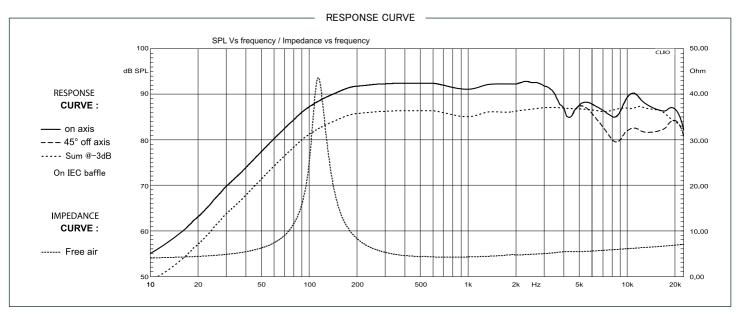






8003 UMA

3"/75 MM CONE MIDRANGE



SPECIFICATIONS							
Technical Characteristics	Symbol	Value	Units				
GENERAL DATA							
Overall Dimension	Wxh	96 x 147	mm				
Nominal Power Handling (AES)*	Р	120	W				
Transient Power *	Pр	240	W				
Sensivity 1W/1m	SPL	91	dB SPL				
Frequency Response	95 - 16.000		Hz				
Net Weight	538 (uma)		g				
Cone Material	Not pressed pulp and vinylester resin						
*Nominal and Transient power @ High Pass 200Hz - 12db/Oct							
ELECTRICAL DATA							
Nominal Impedance	Z	4	Ω				
DC Resistance	Ω	3.3	Ω				
Voice coil Inductance	Lbm	0.34	μH				
VOICE COIL AND MAGNET PARAMETERS							
Voice Coil Diameter	Dia	25.5	mm				
Voice coil Height	h	5.7	mm				
Magnetic Gap Height	HE	4.0	mm				
Max Linear excursion	Xmax	±5.7	mm				
Voice Coil Former Aluminum							
Number of layers	Number of layers n 2		2				
Magnet System	_	Neodymium YN52H grade					
Efficiency	η°	0.26	%				
BL Product	BxL	3.83	Na				
Magnet dimension	ØxØxh	45x29x5	mm				
Magnet weight	m	37	g				
T&S PA	T&S PARAMETERS						
Suspension Compilance	Cms	0.8	N/m				
Mechanical Q Factor	Qms	4.76					
Electrical Q Factor	Qes	0.42					
Total Q Factor	Qts	0.39					
Mechanical Resistance	Rms	0.36	Ω				
Moving Mass	mms	2.45	g				
Eq. Comp. Air Load	VAS	0.95	I				
Resonance Frequency	Fs	113	Hz				
Effective Piston Area	SD	29	cm²				

CROSSOVER VALUE					
Fc	Crossover frequency	Hz			
L	Inductor	mH			
С	Capacitor	μF			
R	Resistance	Ω			
S	Crossover Slope	dB/Oct			

