31-july-2009

SPECIFICATION SHEET

Speaker type:			B172-16 Series	
Model number :		**SP**	**1630**	**1630NdU**
Upgrade			Preliminary	Preliminary
Architecture particularities:			**Natural Convection Ferrite magnet System with flux stabilizing ring**	**Natural Convection Neodyme magnet System with flux stabilizing ring**
Typical characteristics				
Rated impedance	Z	Ω	16	
Half space sensitivity (1W@1m)	-	dB SPL	92	94
Usable freq. range	-	Hz	50-4000	
Power handling capacity (AES)	-	W	150	
Max Sound Pressure Level	SPLmax	dB SPL	110	113
Min. impedance modulus	Zmin	Ω@Hz	13.2@350	13.8@380
Voice-coil inductance @ 1kHz	Le_{1k}	mH	1.32	1.53
Voice-coil inductance @ 10kHz	Le_{10k}	mH	0.57	0.75
BL product	BL	N/A	13.0	15.9
Moving mass	Mms	kg	0.0125	0.0125
Thiele-Small parameters: Typical (QC limits)				
Resonance frequency	Fs	Hz	58(±8)	58(±8)
DC Resistance	Re	Ω	11.5(±1.1)	11.5(±1.1)
Mechanical quality factor	Qms	1	3.8	3.8
Electrical quality factor	Qes	1	0.31	0.21
Total quality factor	Qts	1	0.29	0.20
Mechanical suspension compliance	Cms	10^{-6}.m/N	600	600
Effective piston area	Sd	m^2	0.0143	
Equivalent Cas air load	Vas	m^3	0.017	
Max linear excursion	Xmax	±mm	4.5	4.0
Linear displacement volume	Vd	$10^{-3}.m^3$	0.064	0.057
Reference efficiency	η_0	%	1.1	1.6
Unity load volume	$Vas.Qts^2$	$10^{-3}.m^3$	1.4	0.7
Absolute maximum ratings				
Short term max. input voltage	Vmax	V	100	
Max.excursion before damage	Xdam	±mm	8	
Ambient operating temperature	Ta	°C	-10 to +50	
Storage temperature	-	°C	-20 to +70	
Environemental withstanding	-	-	Tropical	
Application information				
Air volume occupied by the driver	-	$10^{-3}.m^3$	0.64	0.50
Speaker net mass		kg	2.600	1.900
Baffle cut-out Diameter (Front mounting)		mm	163.0	
Bolt number & Metric Diameter		-	4xM5	
Bolt Circle Diameter		mm	172.0	
Max Overall dimension (on ears)		mm	187.5	
Max Overall Diemension (out of ears)		mm	163.0	
Flange Height		mm	8.0	
Max Magnet Diameter		mm	139.0	98.0
Max Depth (Front mounting)			68.5	76.5
Recommended reflex box	Vb/Fb	Lts/Hz	12L/65Hz	8L/65Hz

Note: These specifications are stated to be representative of current production after conditionning. Because of our continous research they are subject to change without notice. The latest upgrade dating cancels the previous one.