



MODEL: SP-2805-1
PRODUCT: Dynamic Speaker
EDITION: A/2016

Soberton Inc.

THIS SPECIFICATION COVERS OUR PRODUCT OF DYNAMIC SPEAKER UNIT FOR MOBILE PHONE USE

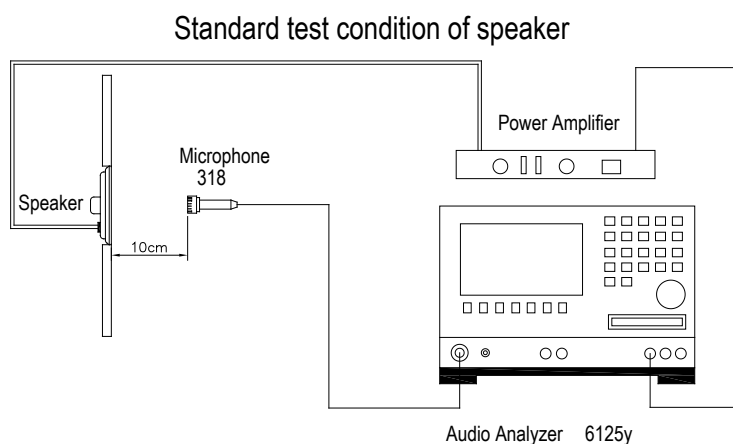
DYNAMIC SPEAKER ELECTROACOUSTIC CHARACTERISTICS

sound pressure level	90±3dB SPL @0.8, 1.0, 1.5 and 2.0KHz in average (0dB SPL=20µPa)
measuring condition	0.1W (Sine wave) 10cm measured with baffler shown in Fig.1
ac impedance	8±15%Ω (@ 2 KHz 1V) without baffle
frequency response curve	As shown in Fig.2
response frequency	650 ± 20%Hz @ 1V. (Without Baffle)
rated noise power	0.3W
short-term max. power	0.5W must be normal at a white noise (1W, F ₀ -20KHz) for 1 minute
operation test	Must be free audible noise (buzzes and rattles) 300 ~8KHz frequency range, input level up to 1.6Vrms
distortion	Less than 10% @1KHz , 0.1M , 0.1W frequency range, input level up to 0.1W

GENERAL SPECIFICATIONS

operating temperature range	-20°C ~ +55°C
standard test conditions	
temperature	17°C ~ 25°C
relative humidity	45% ~ 80%(RH)
dimension	Ø28 X 4.8mm

MEASURING METHOD (SPEAKER MODE) (Figure 1)



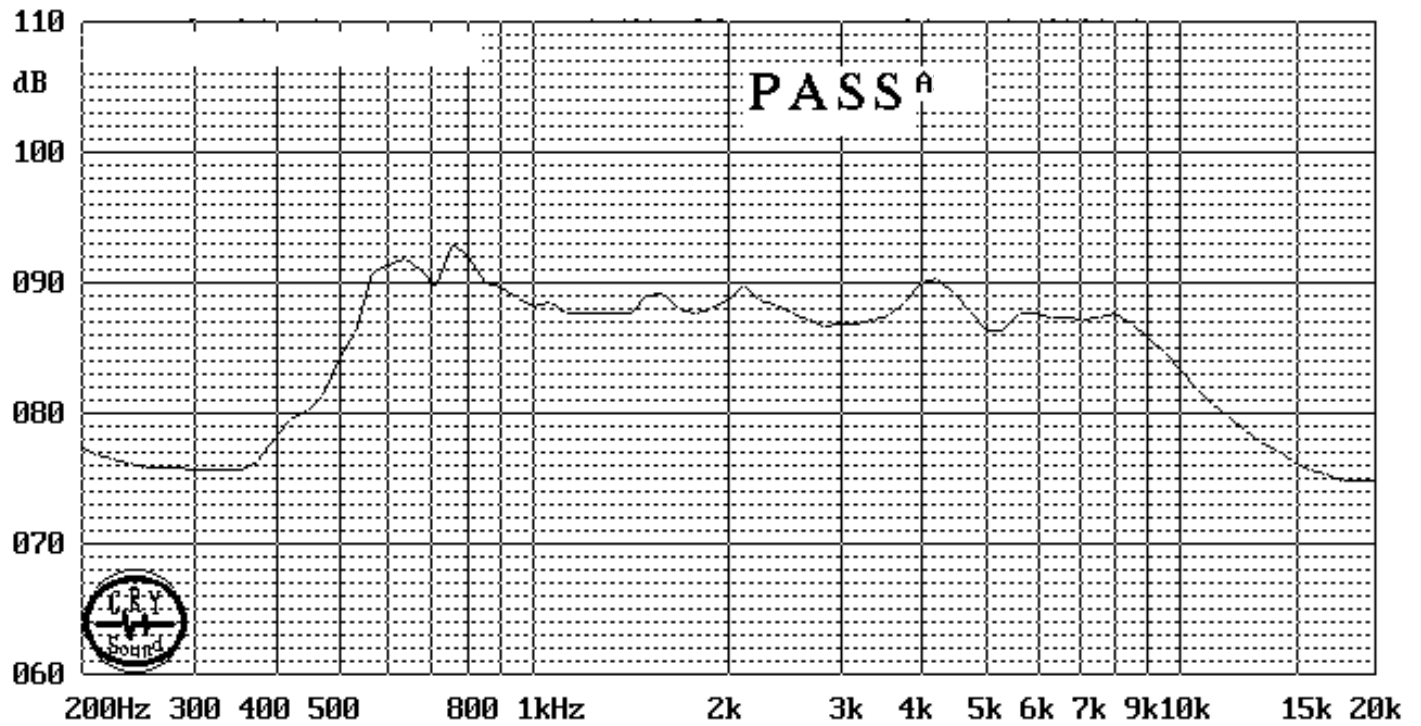
TEST CONDITION	
STANDARD	
temperature	15 ~ 35°C
relative humidity	45% ~ 85%
atmospheric pressure	860mbar to 1060mbar.
STANDARD TEST FIXTURE	
input power	0.1W (0.89V)
zero level	-dB
mode	TSR
potentiometer range	50dB
sweep time	0.5sec



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TYPICAL FREQUENCY RESPONSE CURVE (Figure 2)





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RELIABILITY TESTS

The sound pressure as specified shall neither deviate more than $\pm 3\text{dB}$ from the initial value, nor have any significant damage after any of following testing.

HIGH TEMPERATURE TEST

high temperature	$+60\pm 2^\circ\text{C}$
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duration	96 hours
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LOW TEMPERATURE TEST

low temperature	$-20\pm 2^\circ\text{C}$
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duration	96 hours
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HEAT SHOCK TEST

high temperature	$+60\pm 2^\circ\text{C}$
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low temperature	$-20\pm 2^\circ\text{C}$
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duration	1 hour
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changeover time	< 30 seconds
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cycle	100
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HUMIDITY TEST

temperature	$+40\pm 2^\circ\text{C}$
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relative humidity	90~95%
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duration	96 hours
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TEMPERATURE CYCLE TEST

temperature	-20°C $+60^\circ\text{C}$
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duration	45 minutes 45 minutes
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temperature gradient	1~3°C/min.
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cycle	25
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DROP TEST

mounted with dummy set mass	100 g
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height	1.5 m
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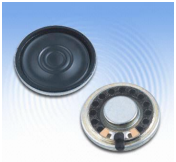
cycle	6 (1 each plain) onto the concrete board
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LOAD TEST

noise signal	White noise (EIA filter)
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input power	0.3W
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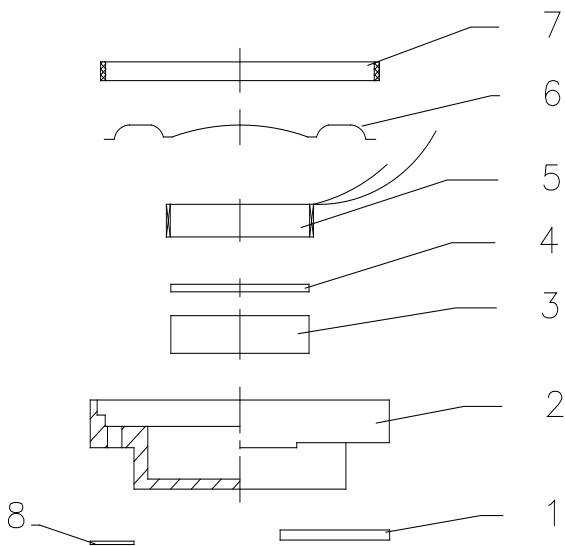
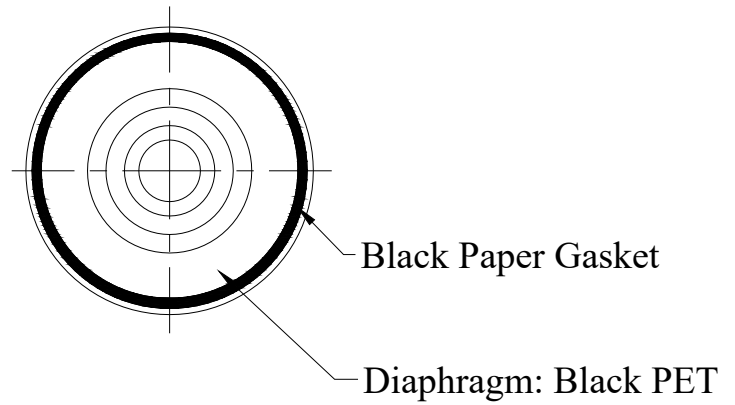
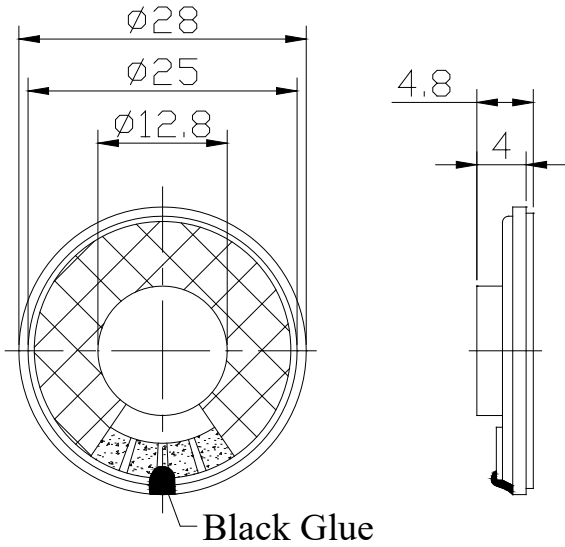
duration	96 hours
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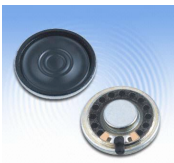
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DIMENSIONS

Tolerance: ±0.5 (unit: mm)



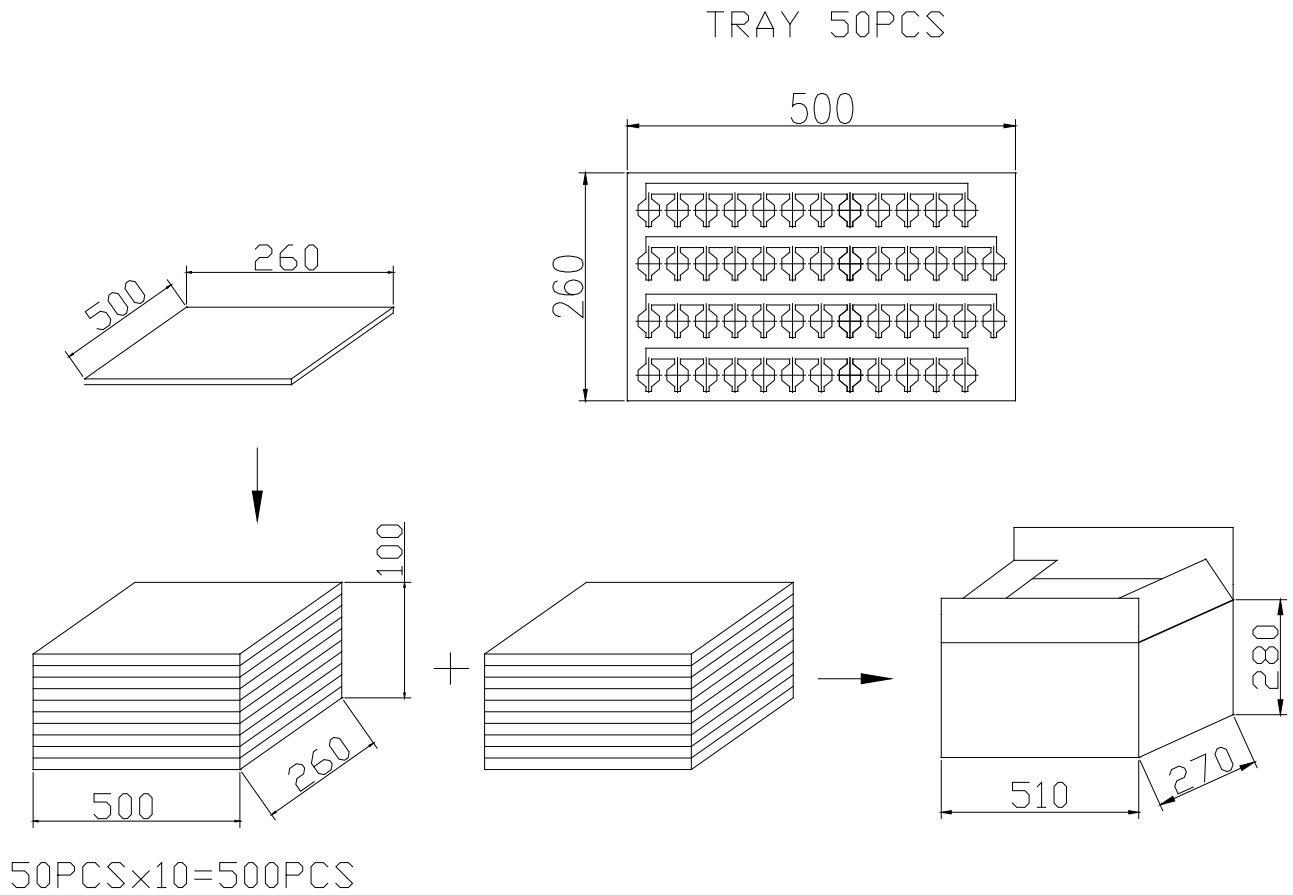
no	item	material	quantity
1	PCB	FR-4	1
2	Frame	SPCC	1
3	Main Magnet	Ø9.5×1.5-N38	1
4	Plate	φ9.7×0.5 SPCC	1
5	Voice Coil	Copper	1
6	Diaphragm	PET	1
7	Gasket	black paper	1
8	Silk Screen	black cloth	1



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PACKING



TRAY	500X260X10mm	1X50PCS=50PCS
CARTON BOX	510X270X280mm	20X50PCS=1000PCS