



MODEL: SP-7140-1
PRODUCT: Dynamic Speaker
EDITION: C/2017

Soberton Inc.

THIS SPECIFICATION COVERS OUR PRODUCT OF DYNAMIC SPEAKER

SPEAKER ELECTROACOUSTIC CHARACTERISTICS

sound pressure level	85±3dB (0.1W/0.1M) @AVE 0.5KHz,1.0KHz,1.5KHz, 2.0KHz
frequency response curve	As shown in Fig.3
resonance frequency (F0)	300±20% Hz
rated noise power	3.0W
short-term max. power	5.0W
frequency range	F0~20KHz.
test setup	Measuring conditions and procedures shown in Fig 1
AC impedance	4Ω ±15%
magnet	Rare earth permanent (Ferrite) magnet φ 32x18x6mm
distortion	Less Than 5% @1KHz Input Rated Power 1W
buzz, rattle, etc.	Not audible from F0 to 20KHz with 3.46V sine wave input
polarity	When positive voltage is applied to the terminal marked (+), diaphragm should be moved to the front.
dimensions	71.0 x40.0x23.0mm
weight	29g ±8%

GENERAL REQUIREMENTS

operating temperature range	-20°C ~ +65°C
storage temperature range	-30°C ~ +80°C
standard test conditions	
temperature	5°C ~ 35°C
relative humidity	45% ~ 85%(RH)
air pressure	860 mbar ~ 1060 mbar



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RELIABILITY TESTS

After these tests , the change of S.P.L will be within $\pm 3\text{dB}$

HIGH TEMPERATURE TEST

high temperature	$+70^{\circ}\text{C}\pm 3^{\circ}\text{C}$
duration	96 hours (leave 6 hours in normal temperature and then check)

LOW TEMPERATURE TEST

low temperature	$-30^{\circ}\text{C}\pm 3^{\circ}\text{C}$
duration	96 hours (leave 6 hours in normal temperature and then check)

HUMIDITY TEST

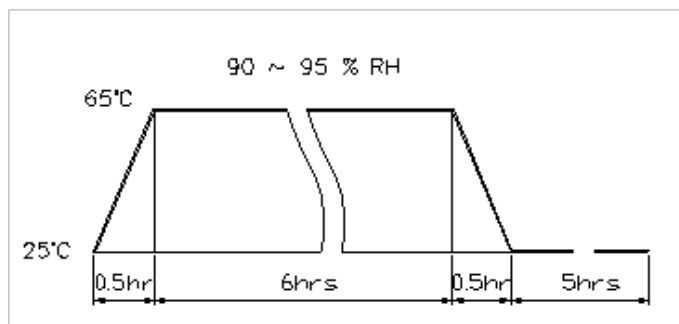
temperature	$+30^{\circ}\text{C}\pm 3^{\circ}\text{C}$
relative humidity	92%~95%
duration	96 hours (leave 3 hours in normal temperature and then check)

VIBRATION

10Hz ~55Hz ~10Hz sine-wave sweep 15 minutes 5G(constant)	
X, Y, Z	3 directions, 2 hours each, total 6 hours

TEMP./HUMIDITY CYCLE

The part will be subjected to 5 cycles. One cycle shall be 6 hours and consist of:



DROP TEST

Drop speakers contained in normal box on to the board 40mm thick 10 times from the height of 75cm

LOAD TEST

Rated Power Pink noise is applied for 24 hours at room temp.

LEAD WIRE PULL STRENGTH

The pull force will be applied to double lead wire:

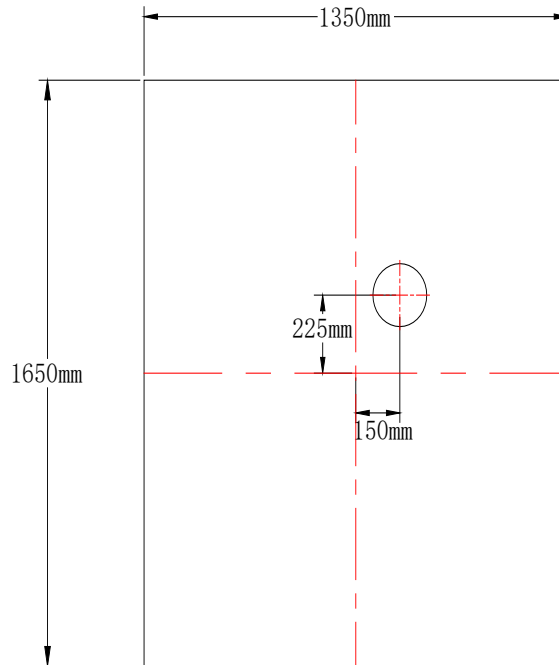
Horizontal 3.0N (0.306kg) for 30 seconds

Vertical 2.0N (0.204kg) for 30 seconds



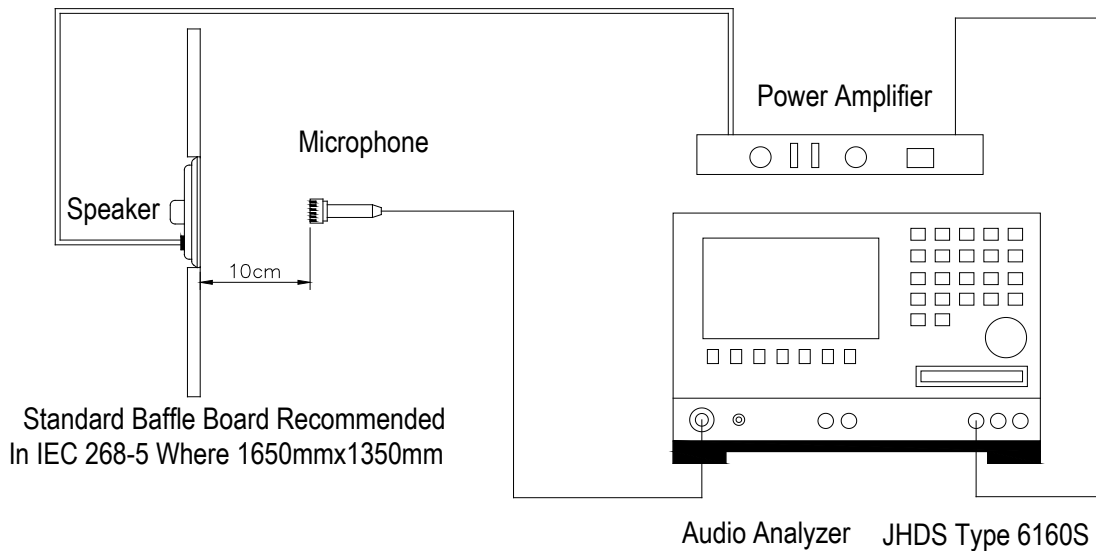
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MEASURING METHOD (SPEAKER MODE) (Fig. 1)



BLOCK DIAGRAM FOR MEASUREMENT METHOD (Fig. 2)

Standard test condition of speaker

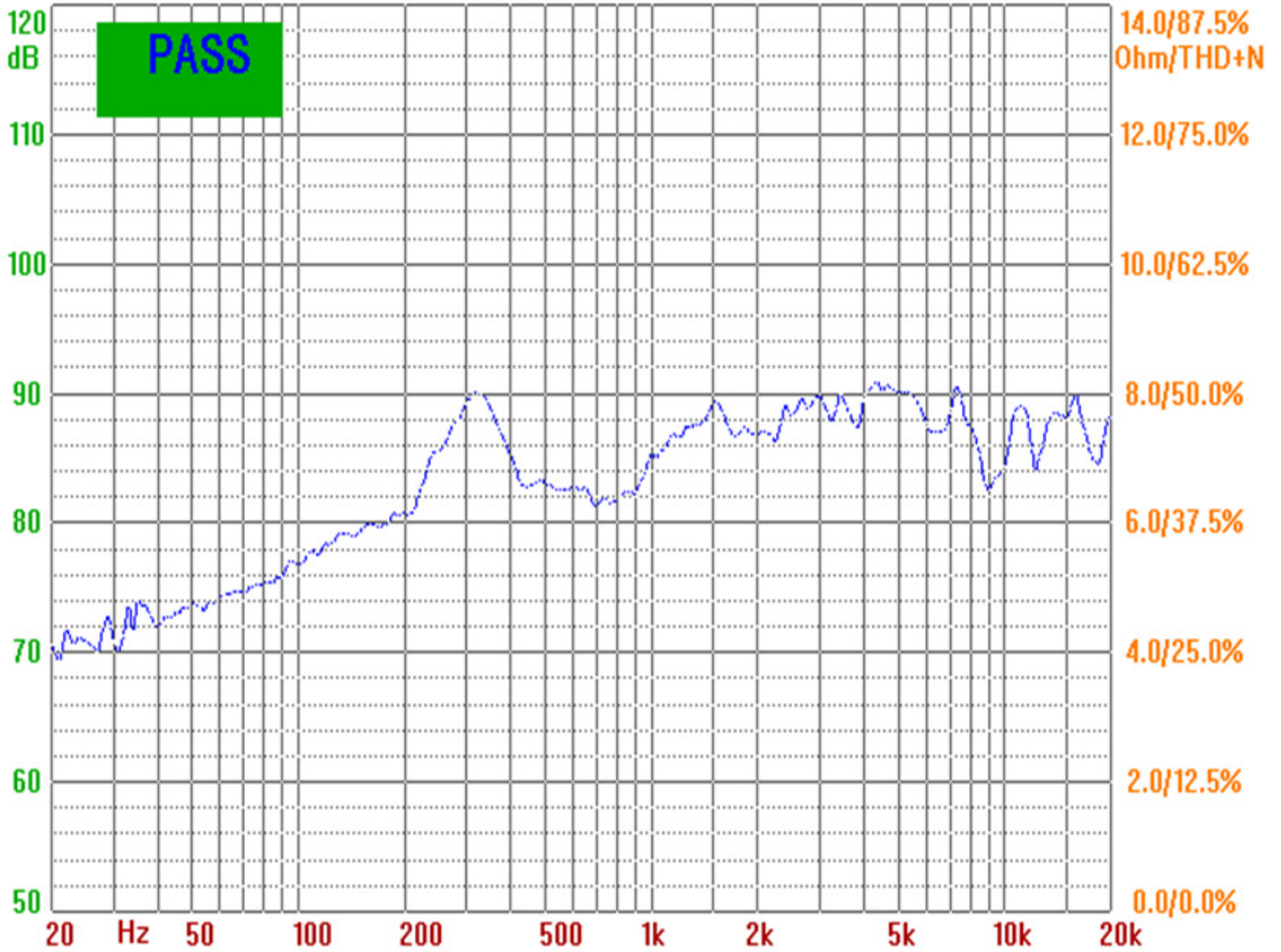




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FREQUENCY RESPONSE CURVE (Fig. 3)

The swept sine-wave frequency response of a loudspeaker should ideally not deviate more than indicated.

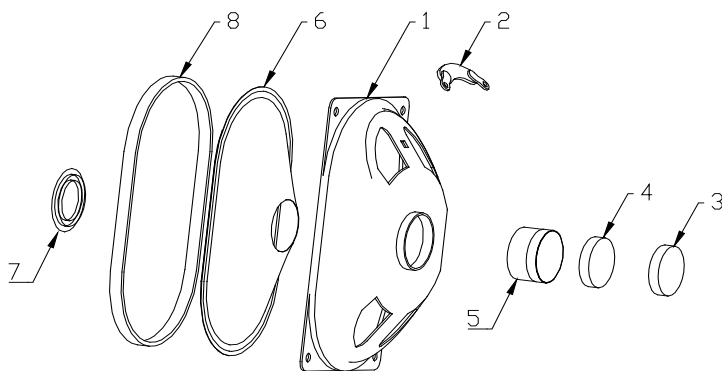
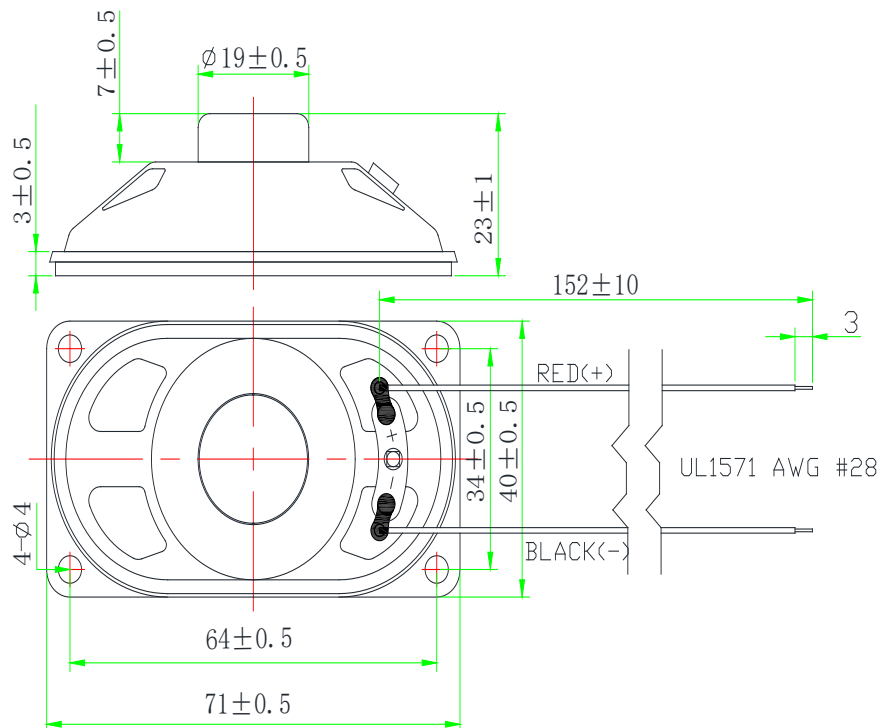




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DIMENSIONS

Tolerance: ± 0.5 unit: mm



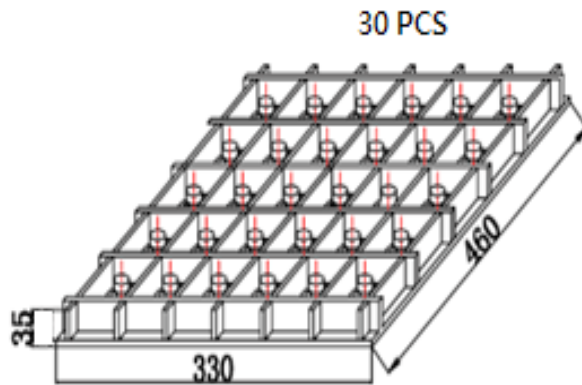
no	item	material	quantity
1	Frame	1	Metal
2	PCB Terminal	1	Paper+metal
3	Magnet	1	Ferrite
4	Plate	1	SPCC
5	Voice Coil	1	Paper+Cu
6	Diaphragm	1	Cloth + paper
7	Cap	1	Paper
8	Gasket	1	Paper



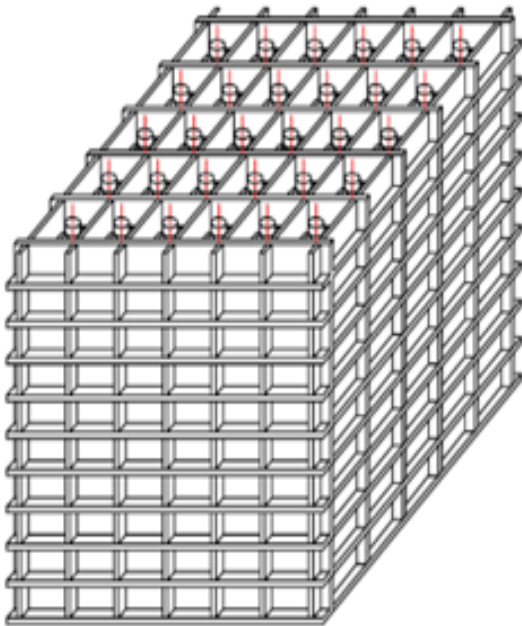
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PACKING



300PCS/Carton
Net Weight: 9Kg
Gross Weight: 11Kg



30PCS x 10=300PCS

