



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

## 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°C $\pm$ 3°C
duration	96 hours (leave 6 hours in normal temperature and then check)

**LOW TEMPERATURE TEST**

low temperature	-30°C $\pm$ 3°C
duration	96 hours (leave 6 hours in normal temperature and then check)

**HUMIDITY TEST**

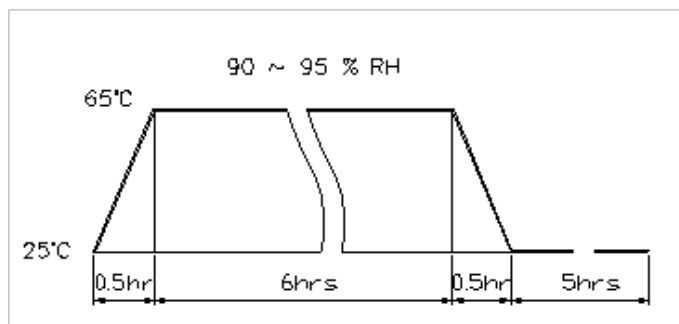
temperature	+30°C $\pm$ 3°C
relative humidity	92%~95%
duration	96 hours (leave 3 hours in normal temperature and then check)

**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:

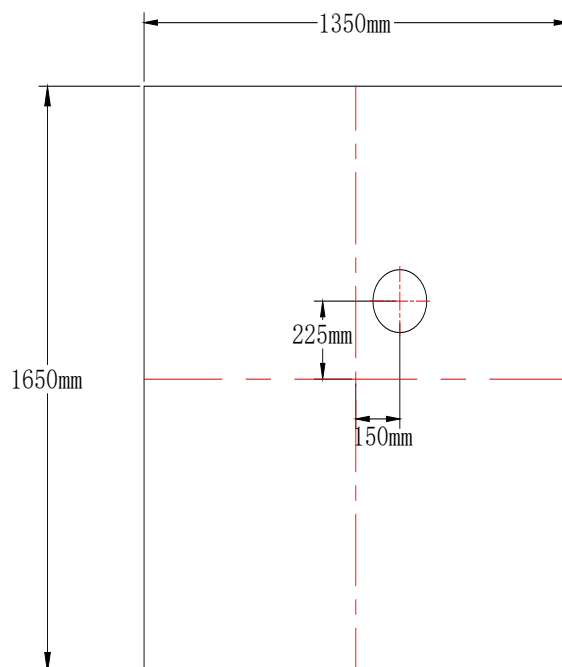
Horizontal 3.0N (0.306kg) for 30 seconds

Vertical 2.0N (0.204kg) for 30 seconds



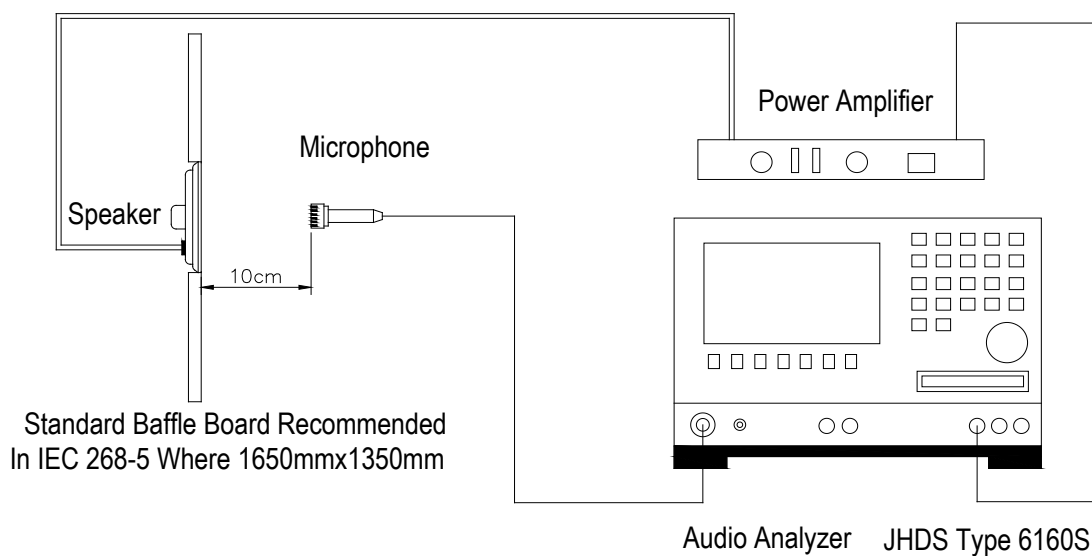
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**MEASURING METHOD (SPEAKER MODE)** (Fig. 1)



**BLOCK DIAGRAM FOR MEASUREMENT METHOD** (Fig. 2)

**Standard test condition of speaker**

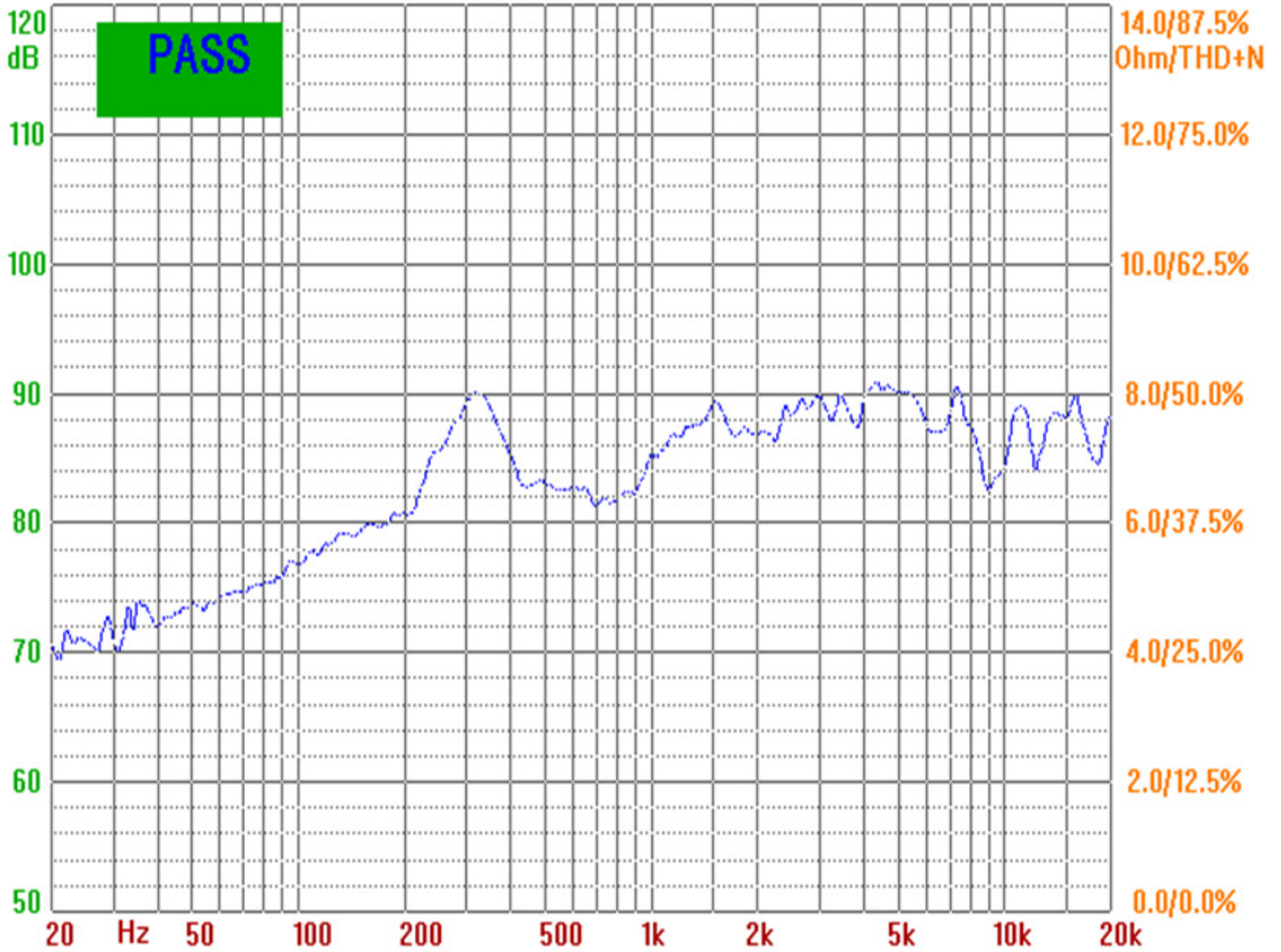




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**FREQUENCY RESPONSE CURVE** (Fig. 3)

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

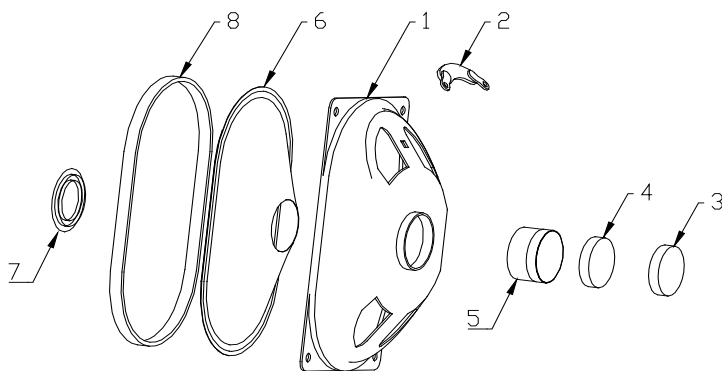
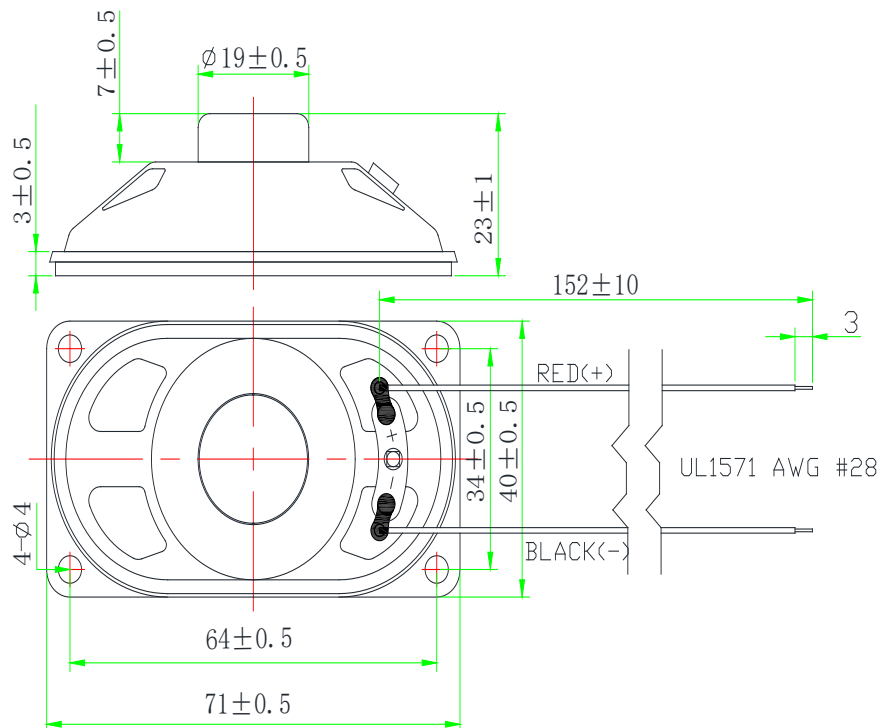




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**DIMENSIONS**

Tolerance:  $\pm 0.5$  unit: mm



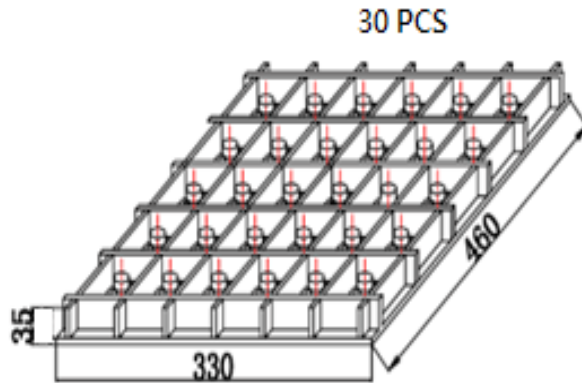
no	item	material	quantity
1	Frame	1	Metal
2	PCB Terminal	1	Paper+metal
3	Magnet	1	Ferrite
4	Plate	1	SPCC
5	Voice Coil	1	Paper+Cu
6	Diaphragm	1	Cloth + paper
7	Cap	1	Paper
8	Gasket	1	Paper



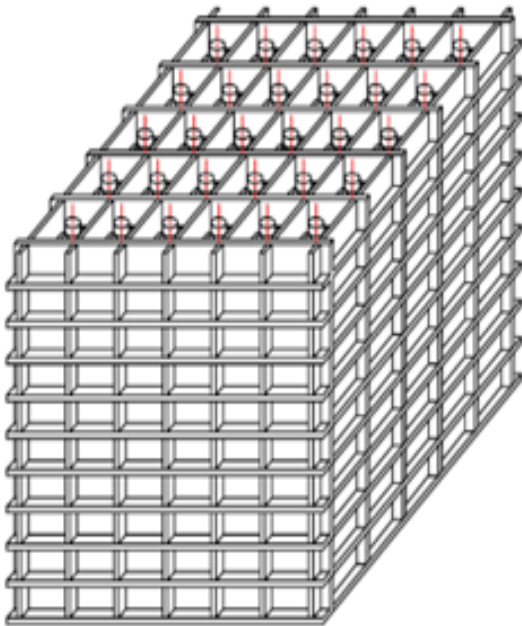
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Soberton Inc.

**PACKING**



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



30PCS x 10=300PCS

