Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

MODEL: SP-1511S-3
PRODUCT: Dynamic Speaker
EDITION: A/2016

Soberton Inc.

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

SPEAKER ELECTROACOUSTIC CHARACTERISTICS

sound pressure level	83±3dB Spl @ 2KHZ 1.0V(Sine wave) 0.1m measured with baffler shown in Fig.1. (1CC BOX)
resonance frequency (FO)	850±20%Hz @ 1Vrms.(In 1CC BOX)
measuring diagram	Shown in Fig.1
typical frequency response curve	Shown in Fig.2.
rated noise power	0.7W (In 1CC Box)
short-term max.power	1.0W (In 1CC Box)
distortion	Less than 10% at 1KHz 1V
operation test	Must be free of audible noise (buzzes and rattles) (200 ~ 3400Hz frequency range, input level up to 2.37Vrms (In 1CC BOX))

GENERAL SPECIFICATIONS

operating temperature range	-25ºC ~ +65ºC
storage temperature range	-40ºC ~ +75ºC
ac impedance	8.0Ω±15% (@2KHz 1Vrms)
dimension	15 x 11 x 4.2 mm

TYPICAL FREQUENCY RESPONSE CURVE

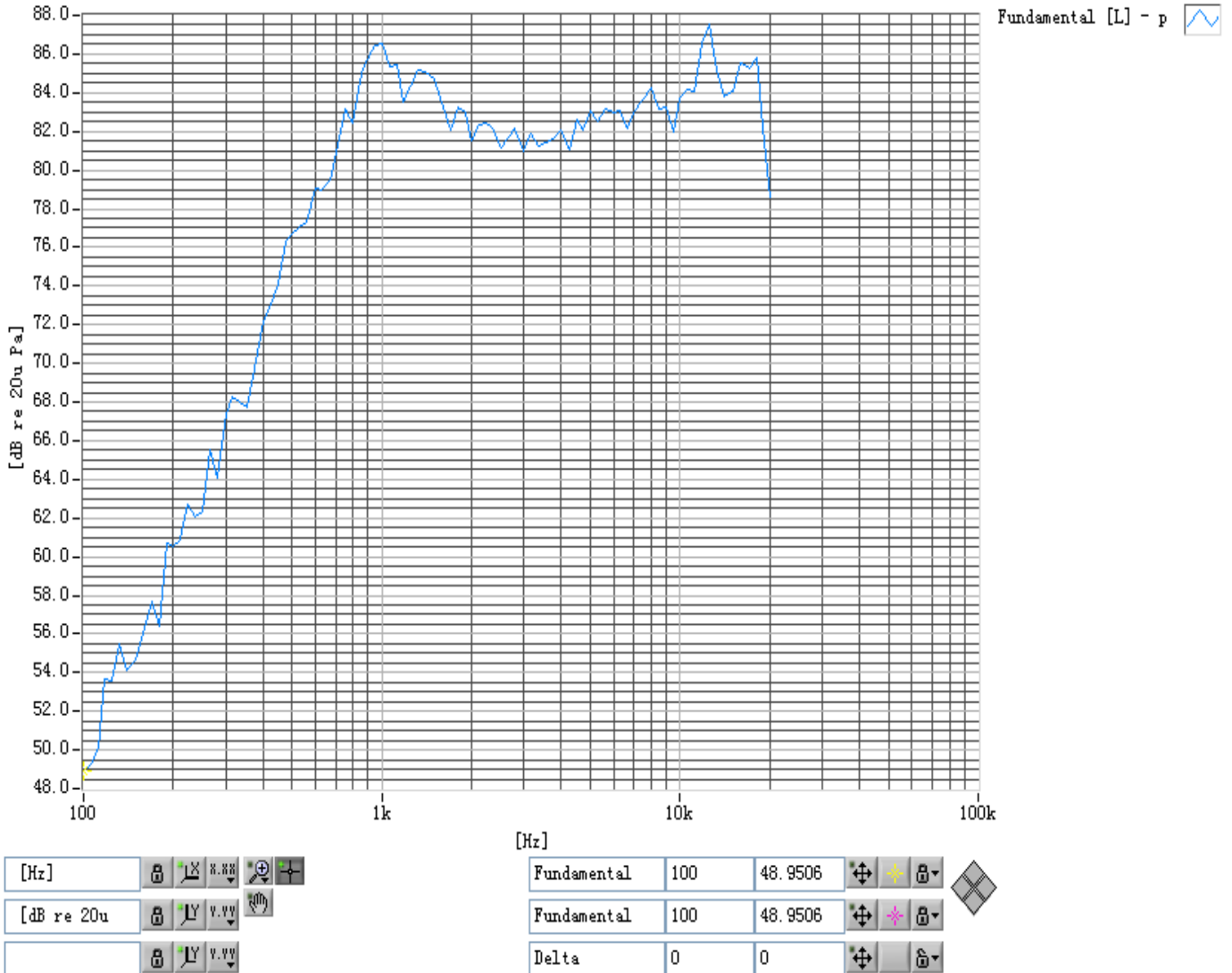#### FREQUENCY MEASURING CIRCUIT (SPEAKER MODE) (Fig.1)

Soberton Inc.
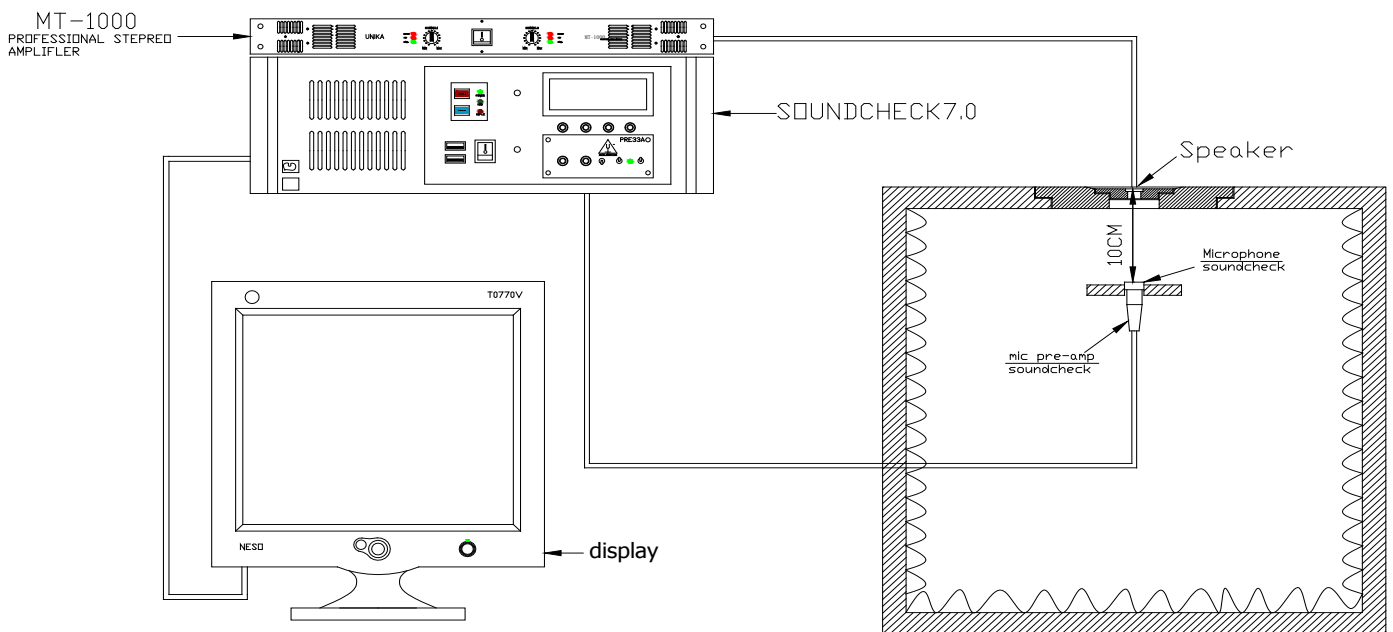
TYPICAL FREQUENCY RESPONSE CURVE (Continued)

TYPICAL FREQUENCY RESPONSE CURVE (SPEAKER MODE) (Fig.2)

XY Graph 1

Fundamental [L] - p

[Hz]						
[dB re 20u						

Fundamental	100	48.9506				
Fundamental	100	48.9506				
Delta	0	0				

TEST CLIMATIC CONDITIONS

STANDARD TEST CONDITIONS

temperature	17~25ºC
relative humidity	45%~80%(RH)
air pressure	860~1060 hPa

RELIABILITY TESTS

The sound pressure as specified shall neither deviate more than ±3dB from the initial value, nor have any significant damage after any of following testing.

HIGH TEMPERATURE TEST

high temperature	+75±2ºC
duration	96 hours

LOW TEMPERATURE TEST

low temperature	-25±2ºC
duration	96 hours

HEAT SHOCK TEST (See in Fig.3)

high temperature	+75±2ºC
low temperature	-40±2ºC
changeover time	< 30 seconds
duration	1 hour
cycle	10

HUMIDITY TEST

temperature	+40±2ºC
relative humidity	90~95%
duration	48 hours

TEMPERATURE CYCLE TEST (See in Fig.4)

temperature	-40ºC	+75ºC
duration	45 minutes	45 minutes
temperature gradient	1~3ºC/min.	
cycle	10	

DROP TEST

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

LOAD TEST

noise signal	White noise (EIA filter)
input power	0.7W (1CC BOX) (2.37Vrms)
duration	96 hours

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TEST METHOD

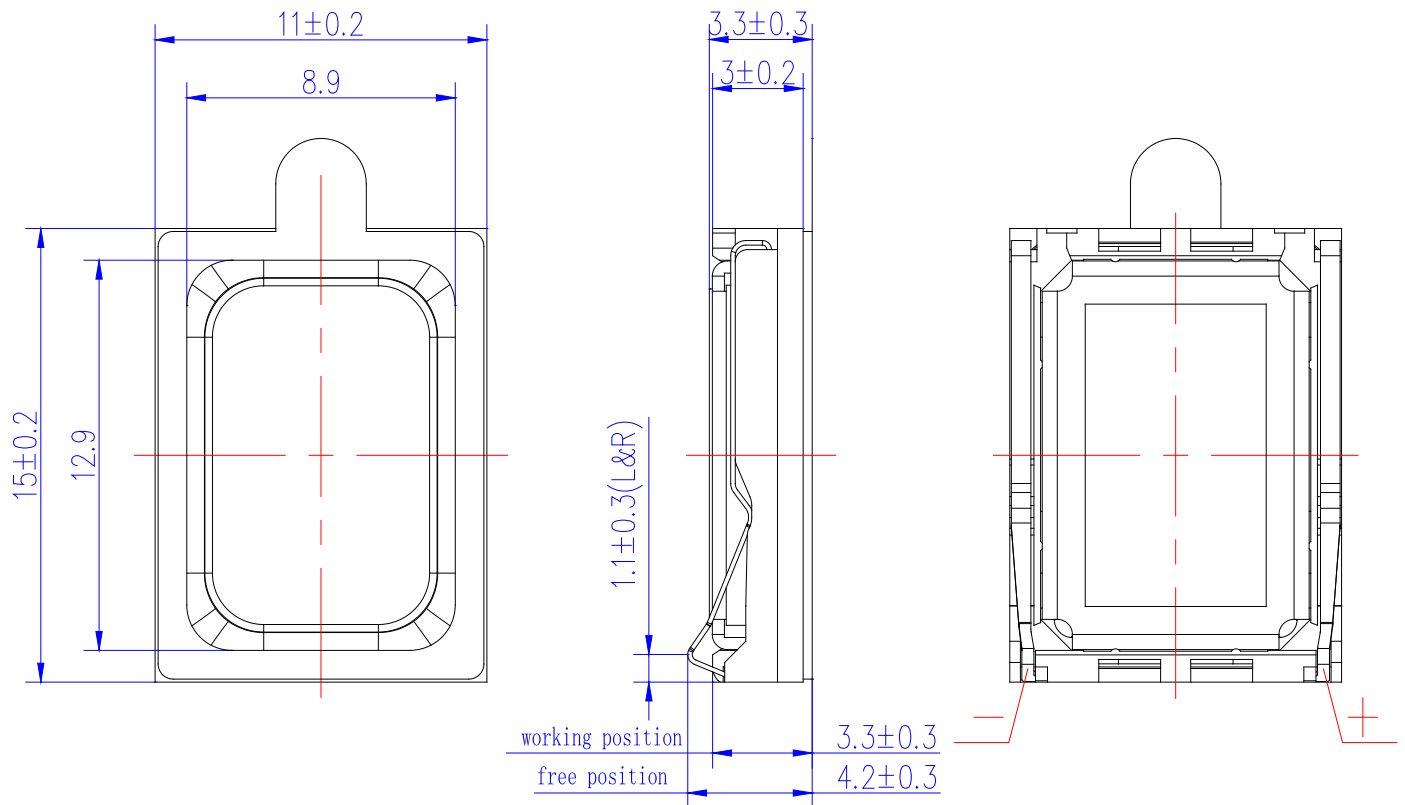### HEAT SHOCK TEST (Fig. 3)
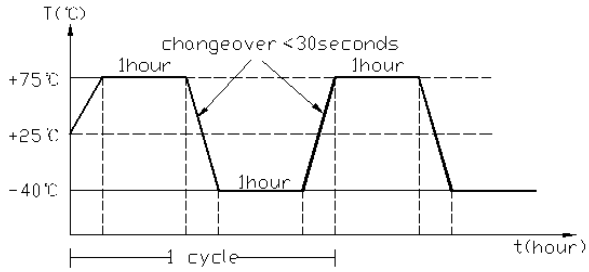
TEMP. CYCLE TEST (Fig. 4)
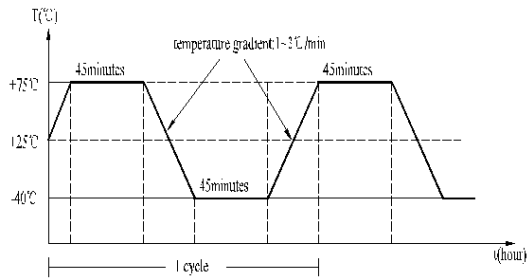
PRODUCT EXTERNAL VIEW AND DIMENSIONS (Fig. 5)

no	item	material	quantity
1	Magnet	Nd-Fe-B	1
2	U-Yoke	Iron	1
3	Pole Piece	Iron	1
4	Voice coil	Copper	1
5	Frame	PPA	1
6	Gasket	PE	1

PACKING

100pcs per tray

100X20=2000pcs

2000pcs per box

Box size:31X24X19cm