

## PRELIMINARY SPECIFICATIONS SHEET

LOUD SPEAKER  
P/N: LSI57-P11177

**DESCRIPTION: D57mm, H12.5mm Loud Speaker, 1W, 500Hz, 8Ohm**  
**RoHS Compliance (Directive 2002/95/EC)**

**VERSION: 01**

**DATE: 4-Nov-2011**

### REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	4-Nov-2011

**APPROVED BY :**

**CUSTOMER NAME :**

**DATE :**

## PRELIMINARY SPECIFICATIONS SHEET

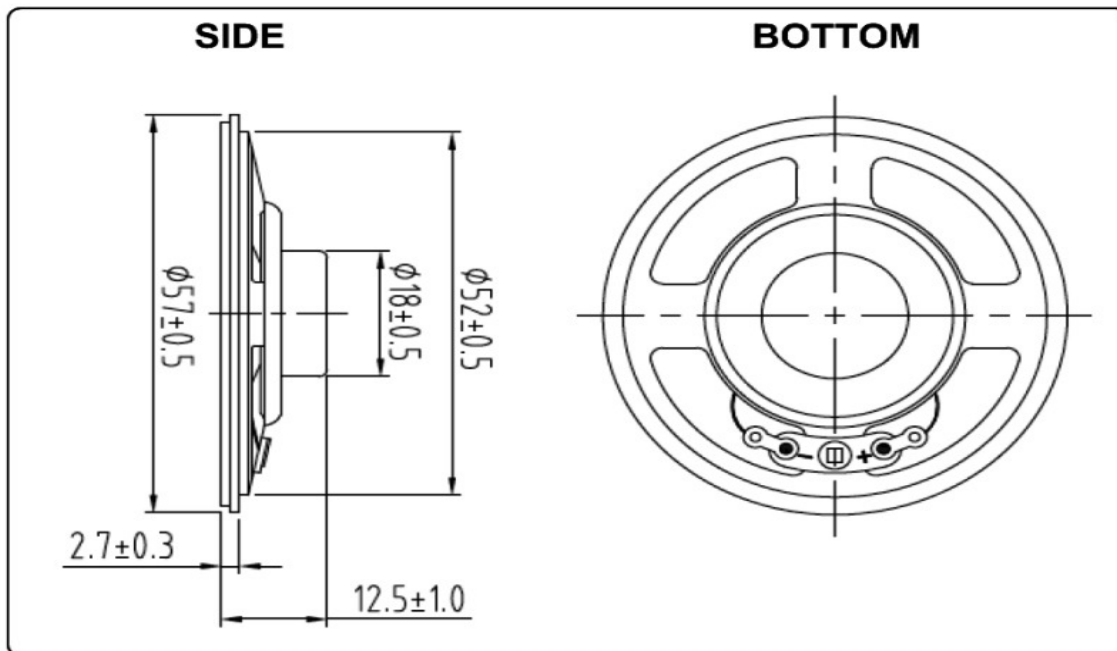
**LOUD SPEAKER**  
P/N: LSI57-P11177

### 1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
*SOUND PRESSURE LEVEL	90 ± 3	dBA
RESONANCE FREQUENCY	500 ± 20%	Hz
FREQUENCY RANGE	F <sub>o</sub> – 6,000	Hz
RATED IMPEDANCE	8 ± 15%	Ohm
RATED POWER	1.00	W
MAX POWER	2.00	W
OPERATING TEMPERATURE	-30 to +70	°C
STORAGE TEMPERATURE	-40 to +85	°C
MAGNET	NdFeB Φ12.5*2.5mm	-
HOUSING	METAL	-

\*Tested at 1W 0.5m average 0.8K 1.0K 1.2K 1.5KHz

### 2. DIMENSIONS (unit in mm)



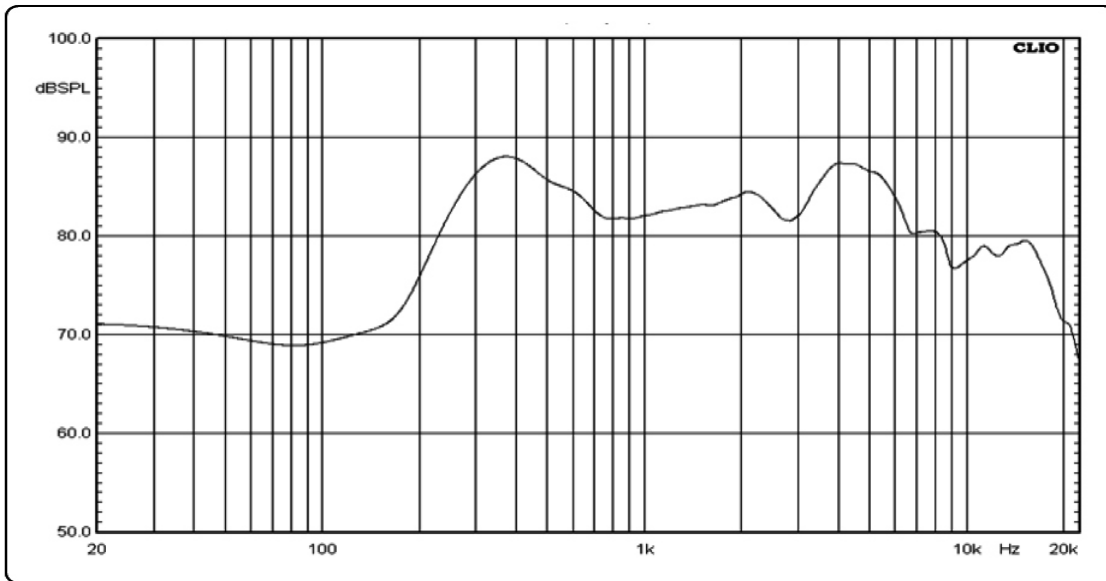
Tolerance:  $\pm 0.5$ mm except specified

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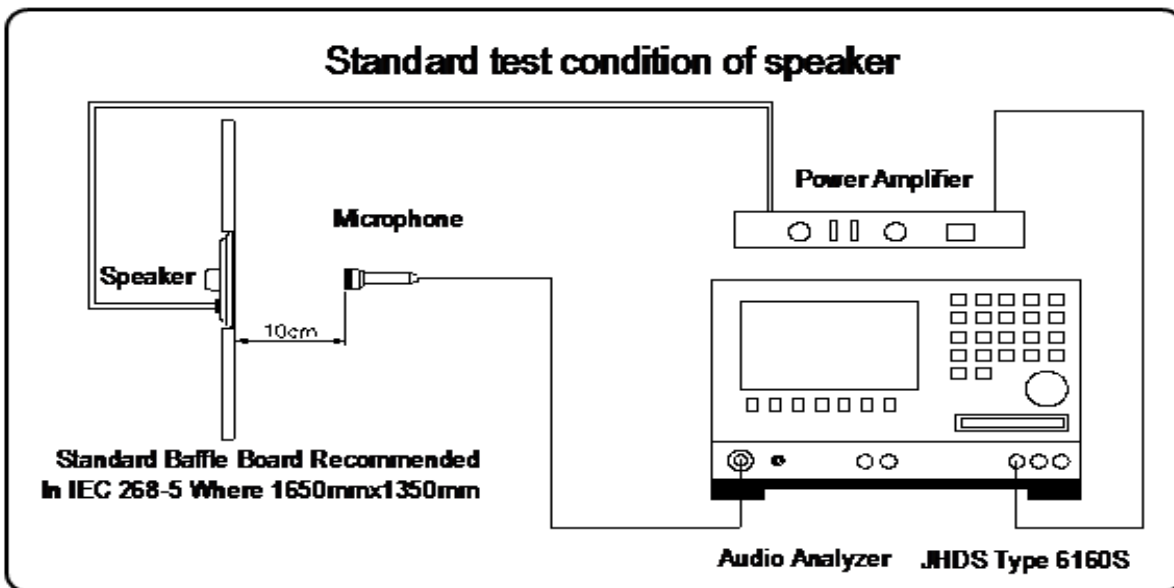
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All specifications subject to change without notice

### 3. FREQUENCY RESPONSE CURVE



### 4. MEASURING CONDITION



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## 5. RELIABILITY TEST

### Testing Criteria

After these test , the change of S.P.L shall be within  $\pm 3$  dB

#### 1) Load Test

Rated Power White noise is applied for 96 hours

#### 2) Temperature Test

a) Keep 96 hours at  $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$  and leave 3 hours in normal temperature and then check

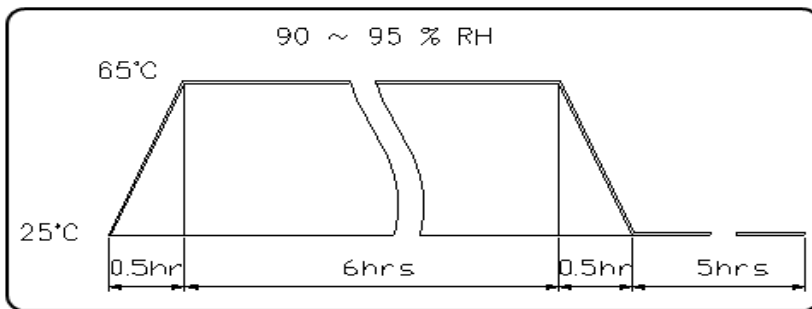
b) Keep 96 hours at  $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$  and leave 3 hours in normal temperature and then check

#### 3) Humidity Test

Keep 96 hours at  $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$  relative humidity 92-95% and leave 3 hours in normal temperature and then checked.

#### 4) Thermal Shock Test

The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;



#### 5) Drop Test

Free drop from 100cm height to the concrete floor X,Y, Z 6 direction. 1 times each, total 6 times.

#### 6) Vibration Test

10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.

#### 7) Terminal Strength Test

Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.

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