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**PRELIMINARY SPECIFICATIONS SHEET**MYLAR SPEAKER  
P/N: MSI50-P16130**DESCRIPTION: D50mm, H7.5mm Mylar Speaker, 1W, 500Hz, 8ohm**  
**RoHS Compliance (Directive 2002/95/EC)****VERSION: 01****DATE: 22-Sep-2016****REVISIONS**

| <b>VERSION</b> | <b>DESCRIPTION</b>        | <b>DATE</b> |
|----------------|---------------------------|-------------|
| 01             | Released from engineering | 22-Sep-2016 |
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**APPROVED BY :**

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**CUSTOMER NAME :****DATE :**

## PRELIMINARY SPECIFICATIONS SHEET

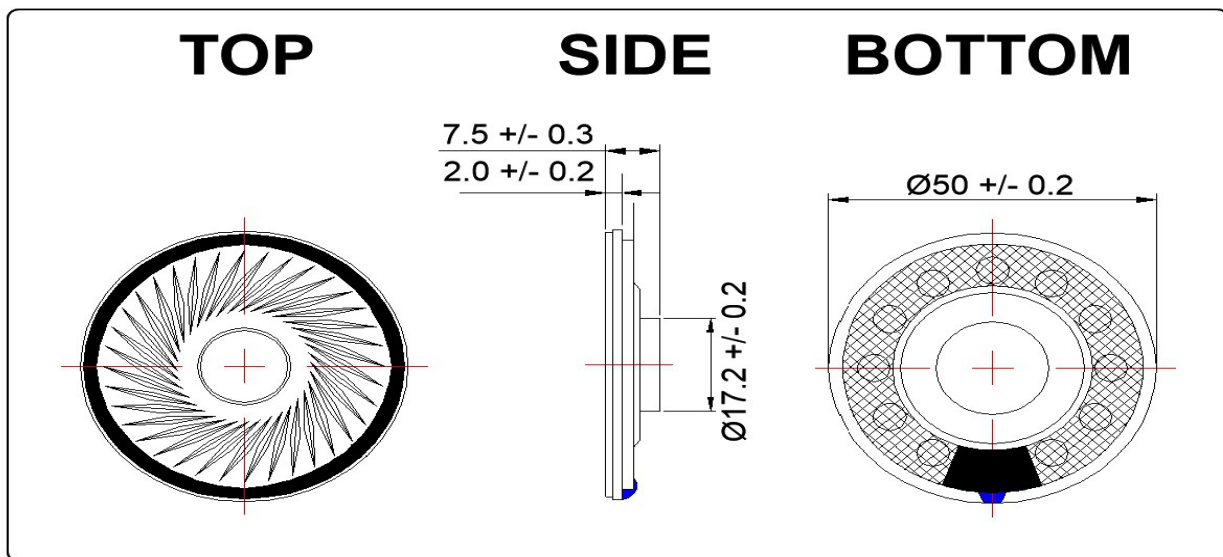
MYLAR SPEAKER  
P/N: MSI50-P16130

### 1. SPECIFICATIONS

| PARAMETERS            | VALUES            | UNITS |
|-----------------------|-------------------|-------|
| *SOUND PRESSURE LEVEL | 94 ± 3            | dBA   |
| RESONANCE FREQUENCY   | 500 ± 20%         | Hz    |
| FREQUENCY RANGE       | Fo – 10,000       | Hz    |
| RATED IMPEDANCE       | 8 ± 15%           | Ohm   |
| RATED POWER           | 1.00              | W     |
| MAX POWER             | 1.50              | W     |
| OPERATING TEMPERATURE | -20 to +60        | °C    |
| STORAGE TEMPERATURE   | -30 to +70        | °C    |
| MAGNET                | NdFeB Φ12.5*1.5mm | -     |
| HOUSING               | Metal             | -     |

\*Tested at 0.1W 0.1m average 0.8K 1.0K 1.2K 1.5KHz

### 2. DIMENSIONS (unit in mm)

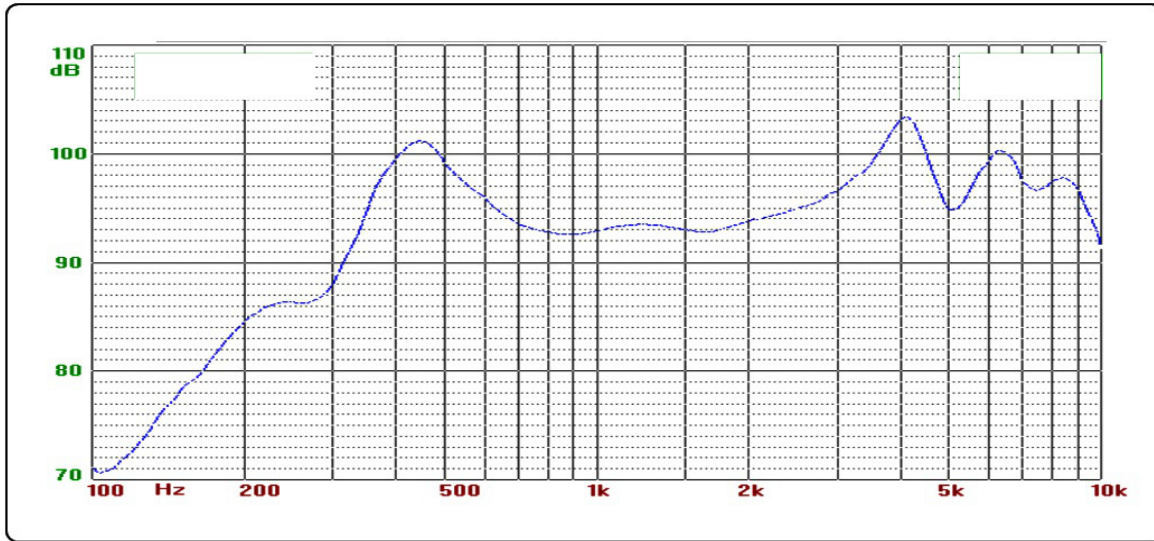


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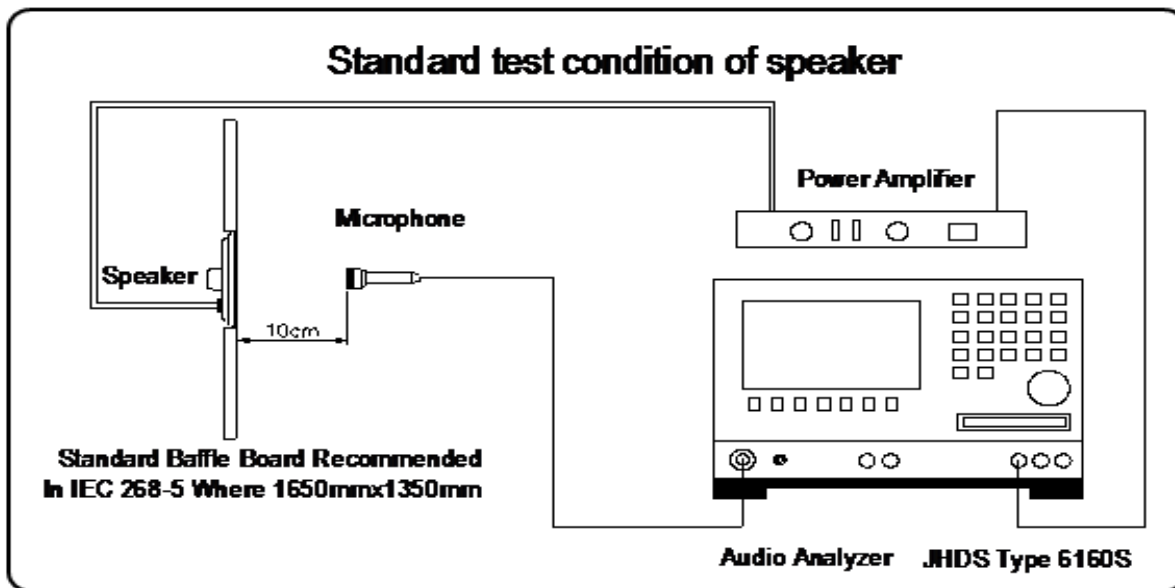
Tolerance: ±0.2mm except specified

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 (1W) White noise is applied for 96 hours

#### 2) Temperature Test

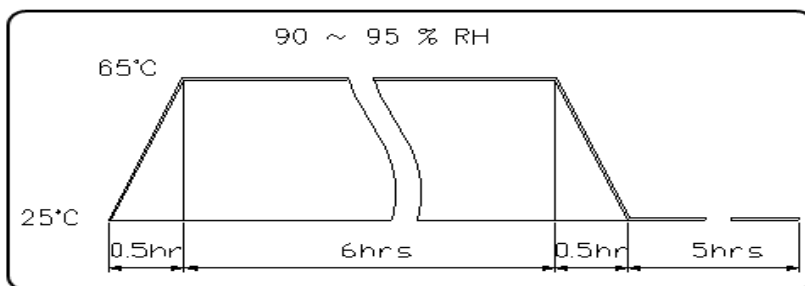
- Keep 96 hours at  $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$  and leave 6 hours in normal temperature and then check
- Keep 96 hours at  $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$  and leave 6 hours in normal temperature and then check

#### 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 6 hours and consist of;



#### 5) Drop Test

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

#### 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

The pull force shall 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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