



Magnetic Buzzer With SMD

7.5×7.5×2.5mm

CC07MP025M16-2700

Revision

| Date | Version | Status | Changes | Approver |
|----------|---------|--------|---------------|----------|
| 2020/6/9 | V0.1 | Draft | First release | AX |

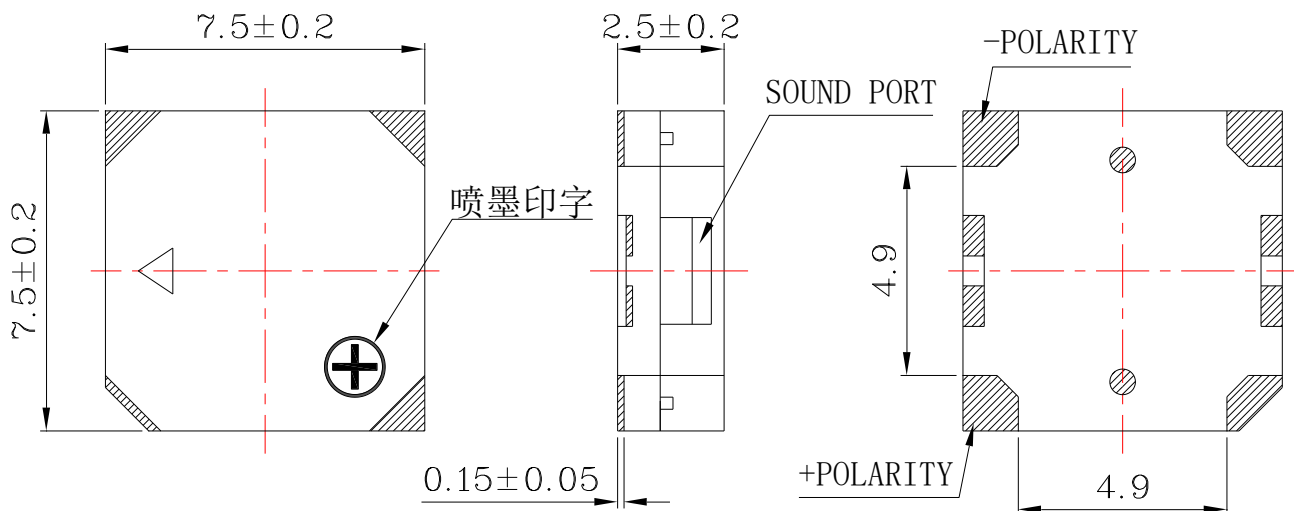
A. SCOPE

This specification applies magnetic buzzer,

B. SPECIFICATION

| No. | Item | Unit | Specification | Condition |
|-----|-------------------------------------|--------------------|----------------------|----------------------------|
| 1 | Oscillation Frequency | Hz | 2700 | Vo-p=1/2duty , square wave |
| 2 | Operating Voltage | Vo-p | 2.5~4.5 | |
| 3 | Rated Voltage | Vo-p | 3.6 | |
| 4 | Current Consumption | mA | MAX. 100 | at Rated Voltage |
| 5 | Sound Pressure Level | dB | MIN. 80 | at 10cm at Rated Voltage |
| 6 | Coil Resistance | Ω | 16 \pm 3 | |
| 7 | Operating Temperature | $^{\circ}\text{C}$ | -30 ~ +70 | |
| 8 | Storage Temperature | $^{\circ}\text{C}$ | -40 ~ +85 | |
| 9 | Dimension | mm | 7.5 x 7.5 x H2.5 | See appearance drawing |
| 10 | Weight (MAX) | gram | 0.8 | |
| 11 | Housing Material | | LCP(Black) | |
| 12 | Leading Pin | | Tin Plated Brass(Sn) | See appearance drawing |
| 13 | Environmental Protection Regulation | | RoHS | |

C. APPEARANCE DRAWING



Tol : ± 0.5

Unit: mm

D. TESTING METHOD

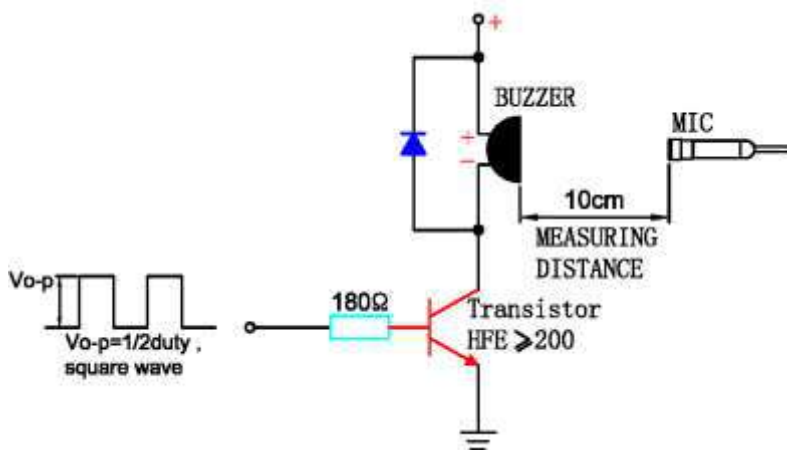
Specifications

Standard Measurement conditions

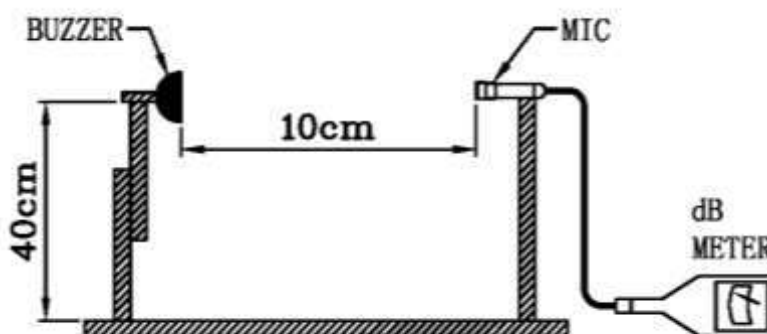
Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%

Acoustic Characteristics:

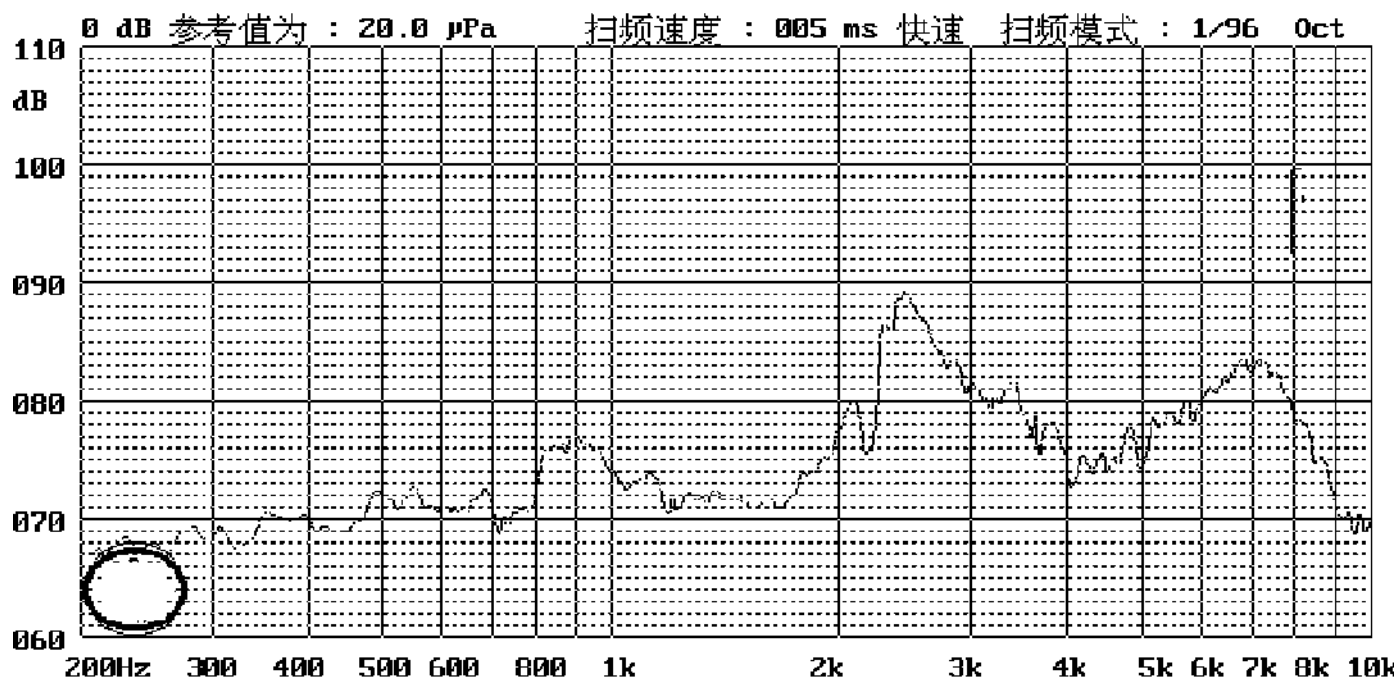
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

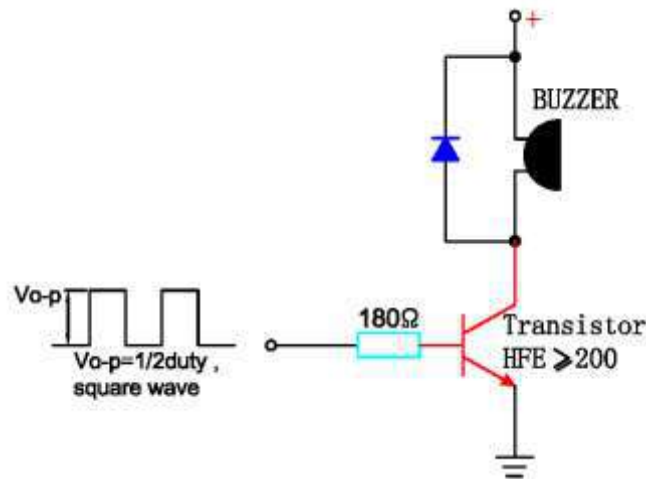


In the measuring test, buzzer is placed as follows:



E. Typical Frequency Response Curve



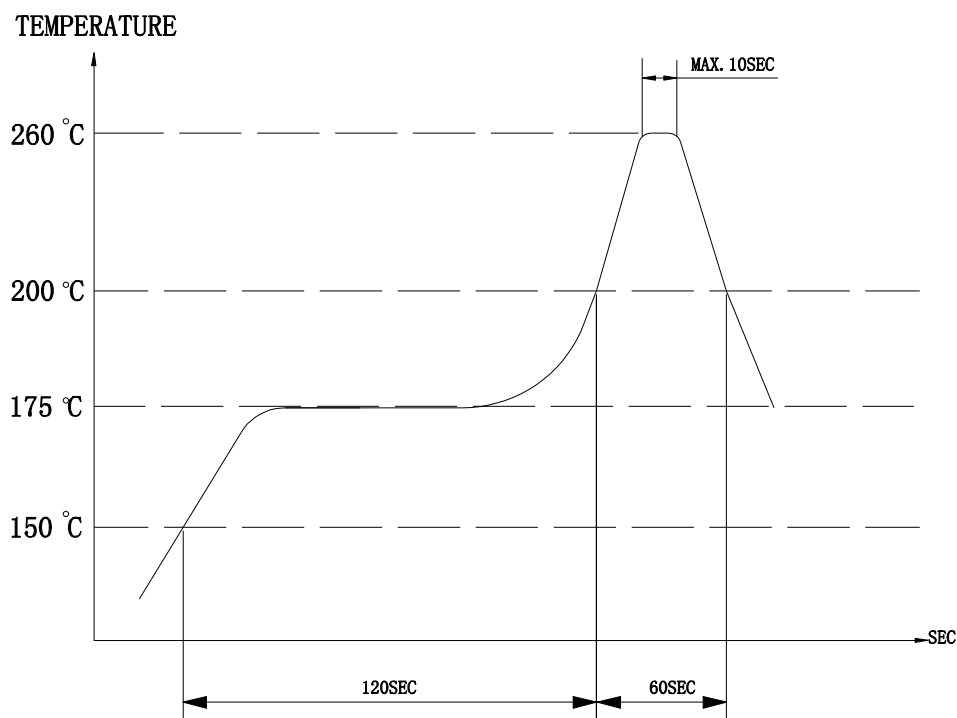


The base current I_b should be high enough so that it saturates the collector current of the transistor with the CB load.

G. Soldering Condition

- (1) Recommendable reflow soldering condition is as follows
- (Reflow soldering is twice)

Note: It is requested that reflow soldering should be executed after heat of product goes down to normal.



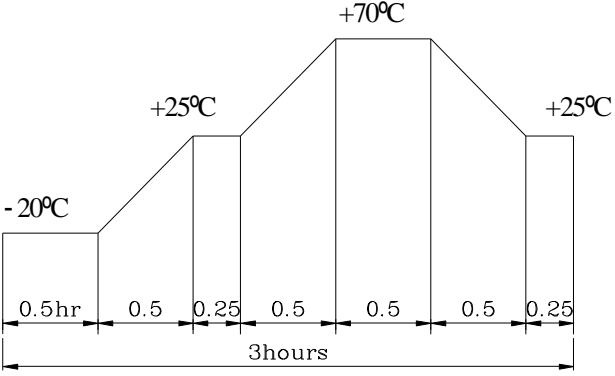
Heat resistant line

(Used when heat resistant reliability test is performed)

- (2) Manual soldering

Manual soldering temperature 350 °C within 5 sec.

H. RELIABILITY TEST

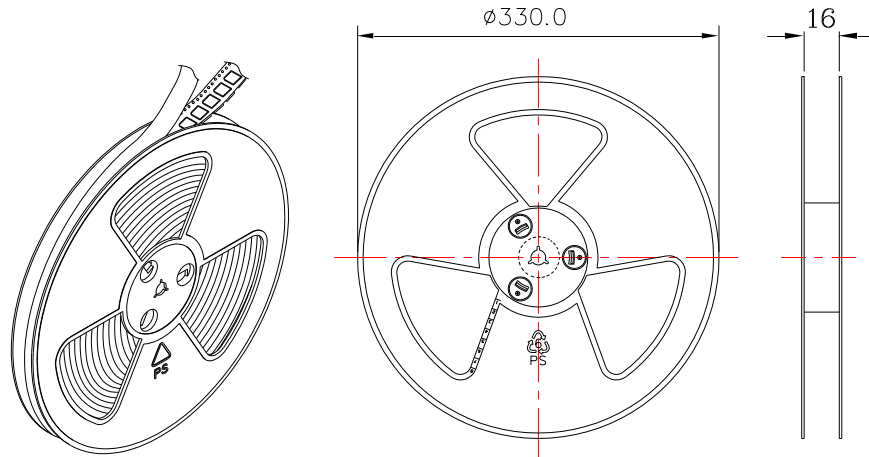
| NO. | ITEM | TEST CONDITION AND REQUIREMENT |
|-----|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | High Temperature Test (Storage) | After being placed in a chamber with 85±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB. |
| 2 | Low Temperature Test (Storage) | After being Placed in a chamber with -40±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB. |
| 3 | Humidity Test | After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB. |
| 4 | Temperature Cycle Test | <p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p>  <p>The diagram shows a temperature cycle profile over a 3-hour period. It starts at -20°C for 0.5 hours, then ramps up to +25°C in 0.5 hours, holds at +25°C for 0.25 hours, ramps up to +70°C in 0.5 hours, holds at +70°C for 0.5 hours, ramps down to +25°C in 0.5 hours, holds at +25°C for 0.25 hours, and finally ramps down to -20°C in 0.25 hours. The total duration is 3 hours.</p> <p>Allowable variation of SPL after test: ±10dB.</p> |
| 5 | Drop Test | Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm . Allowable variation of SPL after test: ±10dB. |
| 6 | Vibration Test | After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: ±10dB. |
| 7 | Solderability Test | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300±5°C for 3±1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals). |
| 8 | Terminal Strength Pulling Test | The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off. |
| 9 | Load test | Rated 3.6 voltage and 2700HZ is applied for 96 hours |

TEST CONDITION.

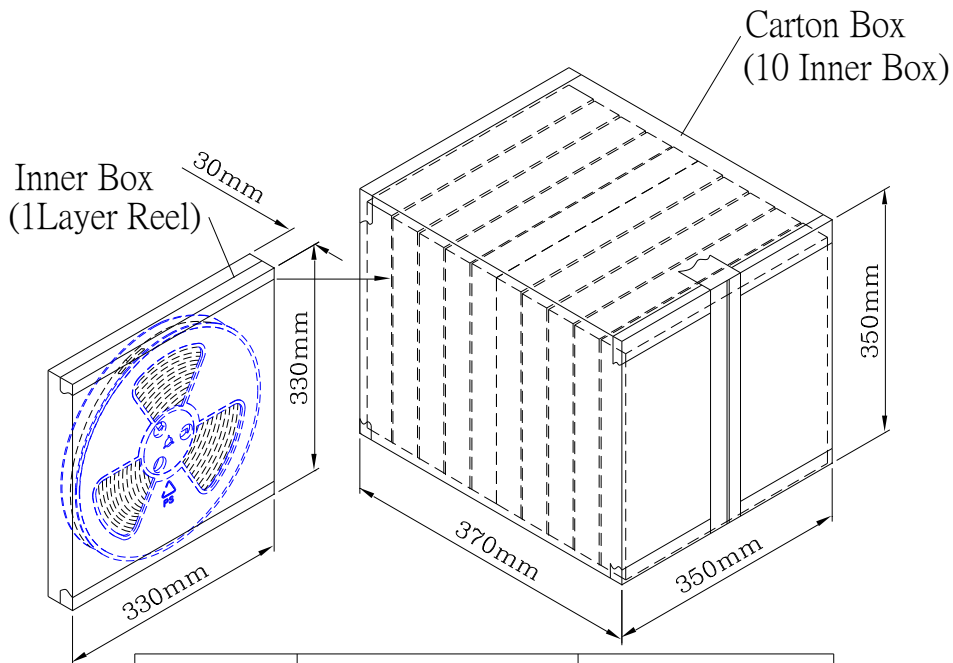
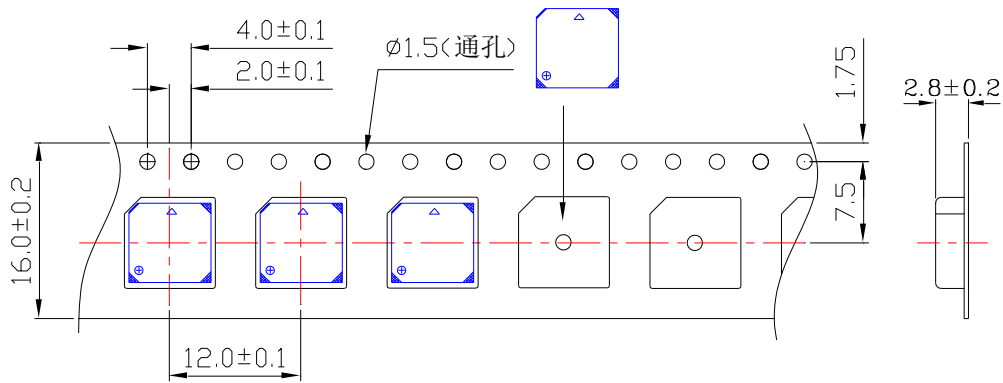
| | | | | |
|-------------------------|---|-----------------------------|----------------------|----------------------------|
| Standard Test Condition | : | a) Temperature : +5 ~ +35°C | b) Humidity : 45-85% | c) Pressure : 860-1060mbar |
| 一般测试条件 | : | a) 温度 : +5 ~ +35°C | b) 湿度 : 45-85% | c) 气压 : 860-1060mbar |
| Judgment Test Condition | : | a) Temperature : +25 ± 2°C | b) Humidity : 60-70% | c) Pressure : 860-1060mbar |
| 争议时测试条件 | : | a) 温度 : +25 ± 2°C | b) 湿度 : 60-70% | c) 气压 : 860-1060mbar |

I. PACKING STANDARD

Specifications



1 Reel : 2000PCS



| | | |
|------------|-------------------|----------------------|
| Inner Box | 330mmx330mmx30mm | 1x2000PCS=2000PCS |
| Carton Box | 350mmx350mmx370mm | 10x2000PCS=20,000PCS |