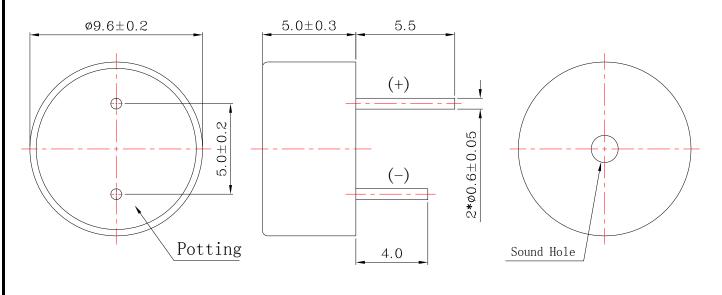
### A. SCOPE

This specification applies Internally driven magnetic buzzers, L-KLS3-MWC-9.6\*05

#### **B. SPECIFICATION**

| No. | ltem                                   | Unit | Specification        | Condition                |
|-----|--|------|----------------------|--------------------------|
| 1   | Oscillation Frequency                  | KHz  | $2.7 \pm 0.3$        |                          |
| 2   | Operating Voltage                      | VDC  | 2~5                  |                          |
| 3   | Rated Voltage                          | VDC  | 3                    |                          |
| 4   | Current Consumption                    | mA   | MAX. 30              | at Rated Voltage         |
| 5   | Sound Pressure Level                   | dB   | MIN. 80              | at 10cm at Rated Voltage |
| 6   | Tone/Pulse Rate                        |      | Constant             |                          |
| 7   | Operating Temperature                  | °C   | -20 ~ +70            |                          |
| 8   | Storage Temperature                    | °C   | -30 ~ +80            |                          |
| 9   | Dimension                              | mm   | Ф9.6 х Н5.0          | See appearance drawing   |
| 10  | Weight (MAX)                           | gram | 1.0                  |                          |
| 11  | Housing Material                       |      | PPO( Black )         |                          |
| 12  | Leading Pin                            |      | Tin Plated Brass(Sn) | See appearance drawing   |
| 13  | Environmental<br>Protection Regulation |      | RoHS                 |                          |

# C. APPEARANCE DRAWING





Unit: mm

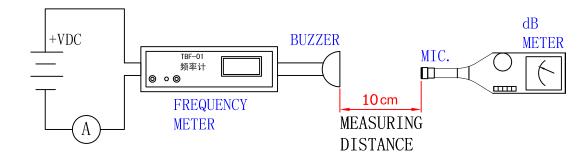


### **D.TESTING METHOD** Standard Measurement conditions

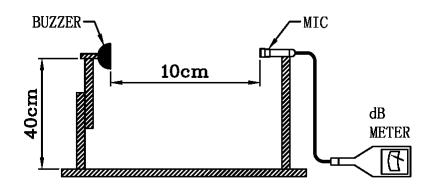
Temperature:25±2°C Humidity:45-65%

## Acoustic Characteristics:

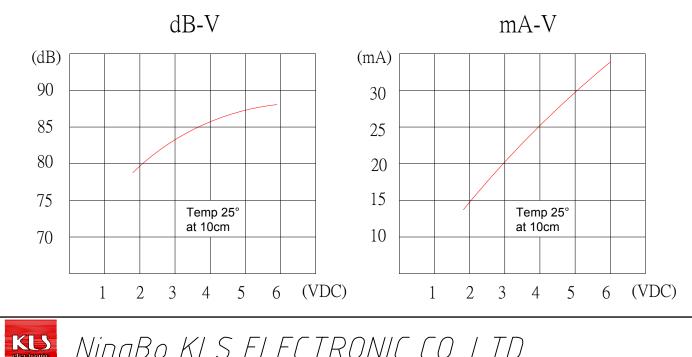
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



# E. VOLTAGE / CURRENT / SOUND PRESSURE CHARACTERISTICS

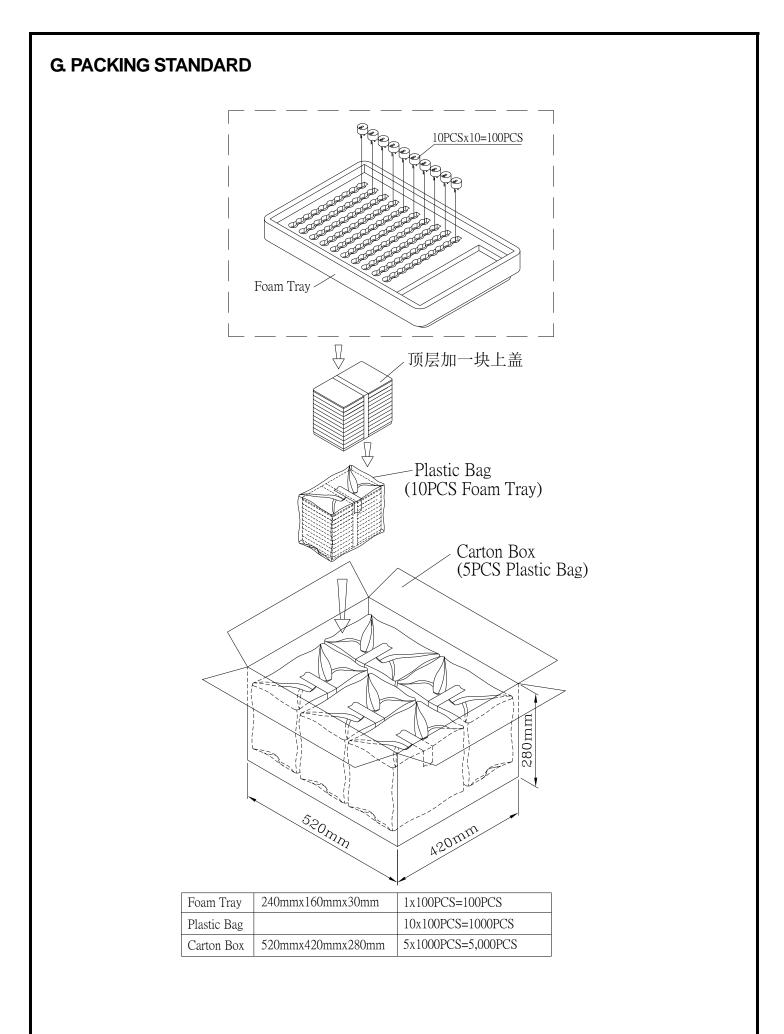


#### F. RELIABILITY TEST

| NO.     | ITEM                              | TEST CONDITION AND REQUIREMENT  |  |  |
|---------|-----------------------------------|---|--|--|
|         | High Temperature                  | After being placed in a chamber with 80±2°C for 96 hours and then                       |  |  |
| 1       |                                   | being placed in normal condition for 2 hours.   |  |  |
|         | Test (Storage)                    | Allowable variation of SPL after test: ±10dB.   |  |  |
|         | Low Temperature<br>Test (Storage) | After being Placed in a chamber with -30±2°C for 96 hours and then                      |  |  |
| 2       |                                   | being placed in normal condition for 2 hours.   |  |  |
|         |                                   | Allowable variation of SPL after test: ±10dB.   |  |  |
|         | Humidity Test                     | After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96                       |  |  |
| 3       |                                   | hours and then being placed in normal condition for 2 hours.                            |  |  |
|         |                                   | Allowable variation of SPL after test: ±10dB.   |  |  |
|         | Temperature Cycle<br>Test         | The part shall be subjected to 5 cycles. One cycle shall be consist of :                |  |  |
|         |                                   | +70°C   |  |  |
|         |                                   |   |  |  |
|         |                                   | +25°C +25°C   |  |  |
|         |                                   |   |  |  |
| 4       |                                   |   |  |  |
|         |                                   | - 20°C  |  |  |
|         |                                   |   |  |  |
|         |                                   | 0.5hr 0.5 0.25 0.5 0.5 0.5 0.25   |  |  |
|         |                                   |   |  |  |
|         |                                   |   |  |  |
|         |                                   | Allowable variation of SPL after test: ±10dB.   |  |  |
| 5       | Drop Test                         | Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm. |  |  |
| 5       |                                   | Allowable variation of SPL after test: ±10dB.   |  |  |
|         |                                   | After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz                    |  |  |
|         | Vibration Test                    | band of vibration frequency to each of 3 perpendicular directions for                   |  |  |
| 6       |                                   | 2 hours.  |  |  |
|         |                                   | Allowable variation of SPL after test: ±10dB.   |  |  |
|         | Solderability<br>Test             | Lead terminals are immersed in rosin for 5 seconds and then                             |  |  |
| 7       |                                   | immersed in solder bath of $+300\pm5^{\circ}$ C for $3\pm1$ seconds.                    |  |  |
| 1       |                                   | 90% min. lead terminals shall be wet with solder  |  |  |
|         |                                   | (Except the edge of terminals).   |  |  |
|         | Terminal Strength<br>Pulling Test | The force of 9.8N(1.0kg) is applied to each terminal in axial direction for             |  |  |
| 8       |                                   | 10 seconds.   |  |  |
|         |                                   | No visible damage and cutting off.  |  |  |
| TEST C  | ONDITION.                         |   |  |  |
|         | Test Condition :                  | a) Temperature : +5 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar             |  |  |
|         |                                   | a) 温度 : +5~+35℃ b) 湿度 : 45-85% c) 气压 : 860-1060mbar                                     |  |  |
| Judgmer | nt Test Condition :               | a) Temperature : +25 $\pm$ 2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar          |  |  |

#The feat Condition : a) iemperature : +25 ± 2 ℃ b) Humidity : 60-70% c) Pressure : 600-1060mbar 争议时测试条件 : a) 温度 : +25 ± 2 ℃ b) 湿度 : 60-70% c) 气压 : 860-1060mbar





KLS