

規格承認書

PECIFICATION FOR APPROVAL

客 戶
CUSTOMER : 立創
項 目
ITEM : 驻极体电容咪头 (ECM)
型 號
TYPE : GMI6027-2C60DB
描述
DESCRIPTION : $\phi 6.0 \times 2.7 \text{ MM}$ 焊点 1033 -60 dB 2V $\leq 2.2\text{K}\Omega$ S/N: $\geq 58 \text{ dB}$
客戶料號
CUSTOMER NO. :
規 格 書 號
SPECIFICATION NO.:
版 本
EDITION NO. : V1.0
日 期
DATE : 2020-1-9

客戶承認

CUSTOMER CONFIRM AND SIGN

| 檢 查 TESTED BY | 審 核 CHECKED BY | 承 認 APPROVED BY |
|------------------|-------------------|--------------------|
| | | |

東莞市贏海電子有限公司

DONGUAN INGHAI ELECTRONICS CO.,LTD

| 製 作 ISSUED BY | 審 查 CHECKED BY | 確 認 APPROVED BY |
|------------------|-------------------|--------------------|
| 周明 | | |

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A. SCOPE

This specification applies electret condenser microphone, GMI6027-2C60DB

B. SPECIFICATION

■ Test condition: $R_L=2.2K\Omega$ $V_S=2.0V$ $TEMP=25^\circ C\pm 2^\circ C$ Related humidity= $65\pm 5\%$

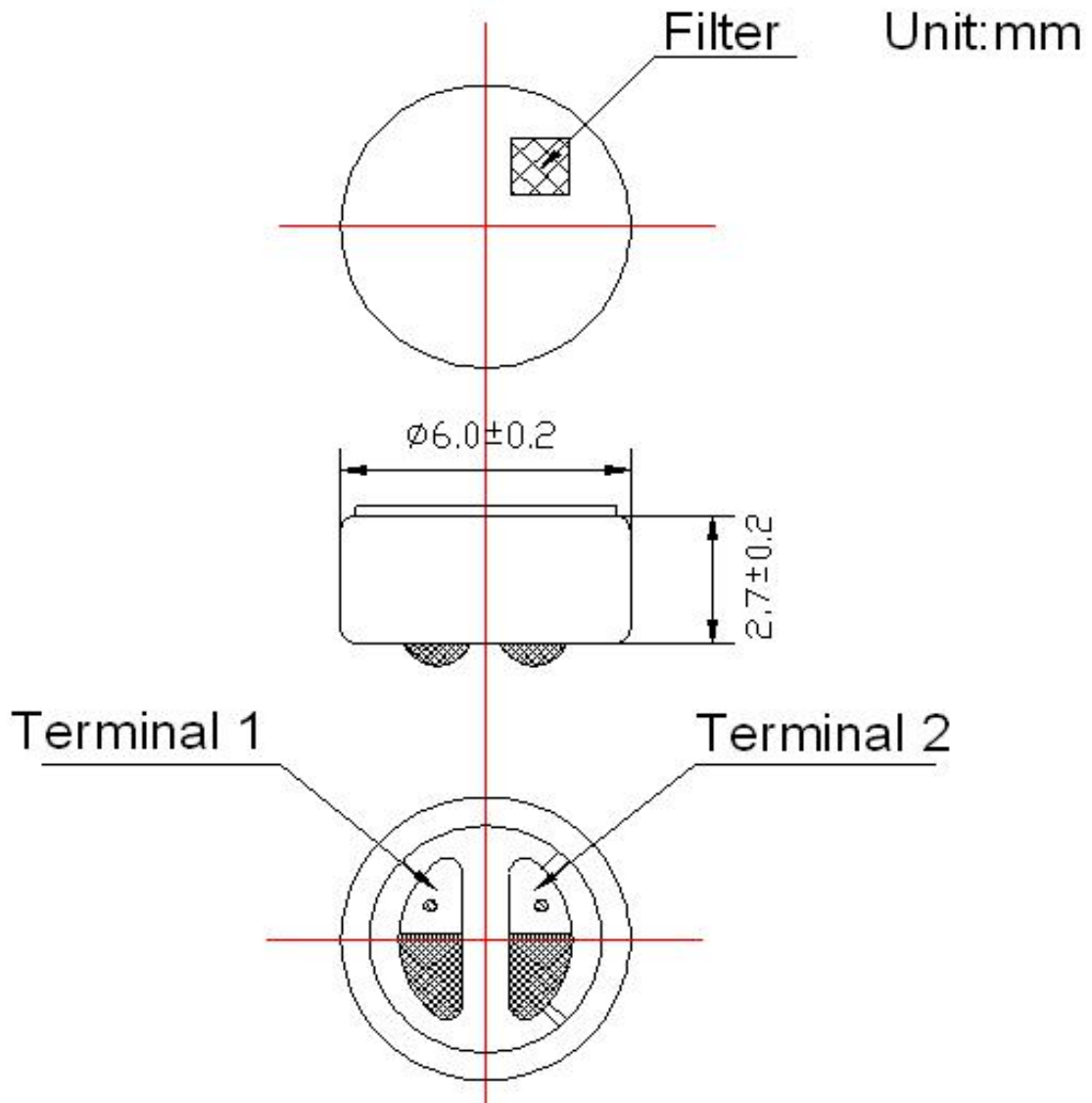
| No. | Item | Symbol | Unit | Specification | Condition |
|-----|----------------------------|----------------|------------|-----------------------|------------------------|
| 1 | Directivity | | | Omnidirectional | |
| 2 | Sensitivity | S | dB | -60 ± 3 | 0dB=1V/Pa 1KHz |
| 3 | Standard operating voltage | V_s | V | 2.0 | |
| 4 | Output impedance | Z_{out} | K Ω | ≤ 2.2 | |
| 5 | Frequency | | Hz | 100-10000 | |
| 6 | Max operating voltage | | V . | 10 | |
| 7 | Sensitivity reduction | $\Delta S-V_s$ | dB | -3 | $V_s=1.5VDC$ to 3VDC |
| 8 | Max. current consumption | I_{DSS} | mA | ≤ 0.5 | |
| 9 | Signal to noise ration | S/N | dBA | ≥ 58 | |
| 10 | Max. Sound Pressure Level | S.P.L | dB | 110 | |
| 11 | Operation temp. | | $^\circ C$ | -20 ~+60 | |
| 12 | Storage temp. | | $^\circ C$ | -30 ~+70 | |
| 13 | Dimension | | mm | $\phi 6.0 \times 2.7$ | See appearance drawing |
| 14 | Terminal | | | Terminal | See appearance drawing |

C. TYPICAL FREQUENCY RESPONSE CURVE

全指向性



D. APPEARANCE DRAWING

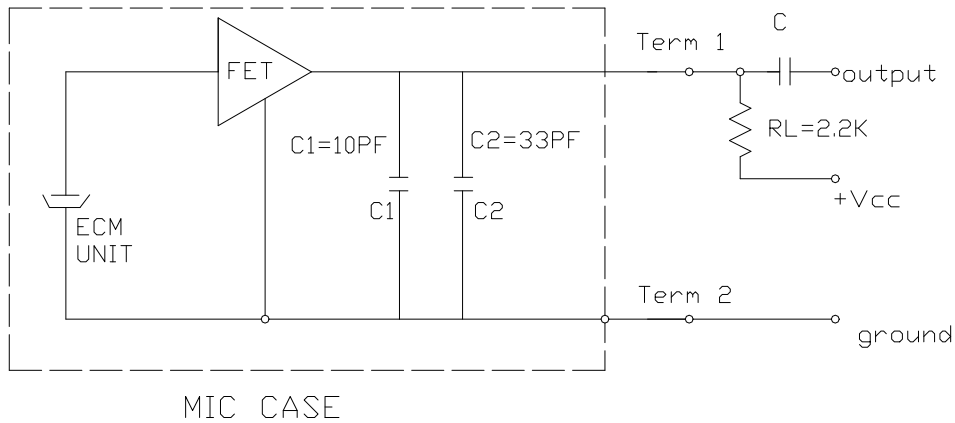


E. MEASUREMENT CIRCUIT

Measurement Circuit

Vs:Source Voltage2.0V RL:Load Resistance2.2KΩ

C1=10pF C2=33pF



F. 可靠性试验 Reliability Test

经过以下所有试验在 20℃的条件下放置 3 小时后,麦克风的灵敏度与试验前比较变化在 3dB 以内

After any following tests, the sensitivity of the microphone to be within $\pm 3\text{dB}$ of initial sensitivity after 3hours of conditioning at 20℃

| | |
|--|---|
| 5-1 振动试验 Vibration | 周波数 1/Frequency1:10Hz~55Hz 振幅/Amplitude:1.52mm 变化/Change of Frequency:1 octave/min 3 方向,各 2 小时/hours in each of 3 axes |
| 5-2 高温试验 Dry Heat | +80±5℃ for 96 hours |
| 5-3 低温试验 Dry Cold | -40±5℃ for 96 hours |
| 5-4 高温高湿试验 Damp Heat | 90%~95%RH, +70±5℃ for 96 hours |
| 5-5 温度循环试验 Temperature cycles | -20℃ ↔ 25℃ ↔ 70℃ (2h) (1h) (2h) (1h) (2h) × 10 cycles |
| 5-6 跌落试验 Packing drop test | Height:1m 顺序:三个面各跌 10 次 Procedure:10 times from each of 3 axes |
| 5-7 温度冲击试验 Temperature impact test | -20℃ ↔ 70℃ 30min 30s 30min × 10 cycles |
| 5-8 静电冲击试验 Electrostatic shock test | 6000V(contact), 8000V(air) × 10 axes |

| | |
|--|----------|
| 备注 Note | |
| 6-1 工作温度范围 Operation Temperature | -20℃～70℃ |
| 6-2 储存温度范围 Storage Temperature | -40℃～80℃ |
| G. 焊接条件 | |
| Soldering Condition | |
| 7-1 焊接使用 90W 的烙铁。 The soldering copper of a type of 90W shall be applied | |
| 焊接条件 Soldering Condition. | |
| 7-2 电烙铁表面温度 $320 \pm 10^\circ\text{C}$ The temperature of the working surface of the soldering copper shall be $320 \pm 10^\circ\text{C}$ | |
| 7-3 焊接时把麦克风嵌入散热能力强的金属块内。 ECM shall be soldered fixed on the metal block(heat sink)which has the higher radiation effects said heat sink Shall contact with of ECM. | |
| 7-4 焊接时间控制在 2~3 秒内。 time for each terminal shall be 2~3 sec. | |
| 7-5 焊接后不能出现针孔。 The pinhole after soldering shall be avoided. | |
| 7-6 静电容易破坏麦克风必须采取措施避免（电烙铁接地，戴静电环等。） ECM may easily destroyed by the static electricity and the countermeasure for eliminating the static electricity (the ground for soldering copper, for worktable and for human body) shall be executed. | |
| 7-7 散热板形状 Shape of heat sink | |
|  | |