

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 : GMI6022-2C54DB
描述
DESCRIPTION : $\phi 6.0 \times H2.2$ mm 焊点 2.0V 1033 -54 dB $\leq 2.2K \Omega$ S/N: ≥ 58 dBA
客戶料號
CUSTOMER NO. :
規格書號
SPECIFICATION NO. :
版本
EDITION NO. : V1.1
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	刘承成	

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A. SCOPE

This specification applies electret condenser microphone, GMI6022-2C54DB

B. SPECIFICATION

■ Test condition: $R_L=2.2K\Omega$ $V_S=2.0V$ $TEMP=20^{\circ}C\pm 2^{\circ}C$ Related humidity= $65\pm 5\%$

No.	Item	Symbol	Unit	Specification	Condition
1	Directivity			Omnidirectional	
2	Sensitivity	S	dB	-54±3	f=1KHz, 1Pa 0dB=1V/Pa
3	Standard operating voltage	Vs	V	2.0	
4	Output impedance	Zout	K Ω	≤2.2	f=1KHz, 1Pa
5	Frequency		Hz	100-10,000	
6	Max operating voltage		V .	10	
7	Sensitivity reduction	Δ S-Vs	dB	-3	f=1KHz, 1Pa Vs=1.5VDC to 3VDC
8	Max. current consumption	IDSS	mA	≤0.5	
9	Signal to noise ration	S/N	dBA	≥58	f=1KHz, P in=1Pa
10	Max input sound level	SPL	dB	110	
11	Operation temp.		°C	-30 ~+70	
12	Storage temp.		°C	-40 ~+85	
13	Dimension		mm	ϕ 6.0 x H2.2	See appearance drawing
14	Terminal			Terminal	See appearance drawing

C. TYPICAL FREQUENCY RESPONSE CURVE

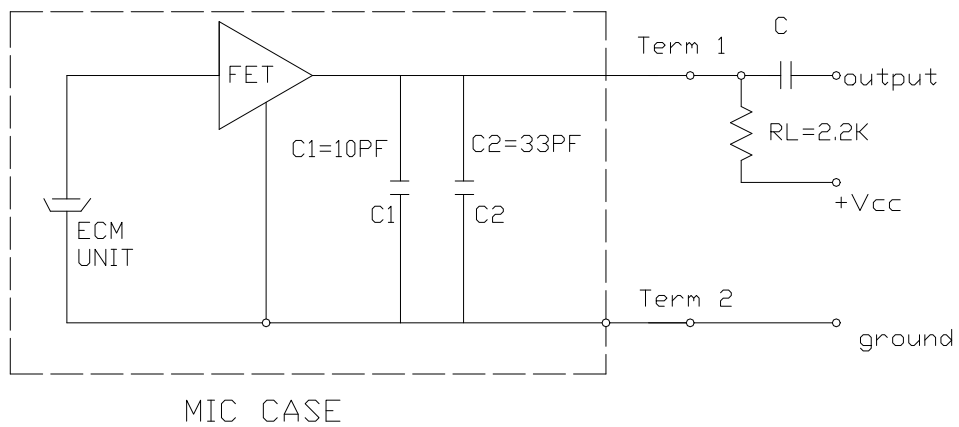
全指向性



D. APPEARANCE DRAWING



E. MEASUREMENT CIRCUIT



F. Explode Drawing



NO.	PARTS
1	PCB
2	Film(FEP)
3	Holder
4	Spacer
5	Outer most shell(Al)
6	Protection fleece
7	FET
8	Electronic line
9	Capacitance

G. 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 \pm 5℃ for 96 hours
5-3 低温试验 Dry Cold	-40 \pm 5℃ for 96 hours
5-4 高温高湿试验 Damp Heat	90%~95%RH, +60 \pm 5℃ for 96 hours
5-5 温度循环试验 Temperature cycles	-20℃ \longleftrightarrow 25℃ \longleftrightarrow 70℃ (2h) (1h) (2h) (1h) (2h) \times 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℃ \longleftrightarrow 70℃ 30min 30s 30min \times 10 cycles
5-8 静电冲击试验 Electrostatic shock test	6000V(contact), 15000V(air) \times 10 axes
备注 Note	
6-1 工作温度范围 Operation Temperature	-30℃~70℃
6-2 储存温度范围 Storage Temperature	-40℃~85℃
H. 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℃ The temperature of the working surface of the soldering copper shall be 320 \pm 10℃	
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.

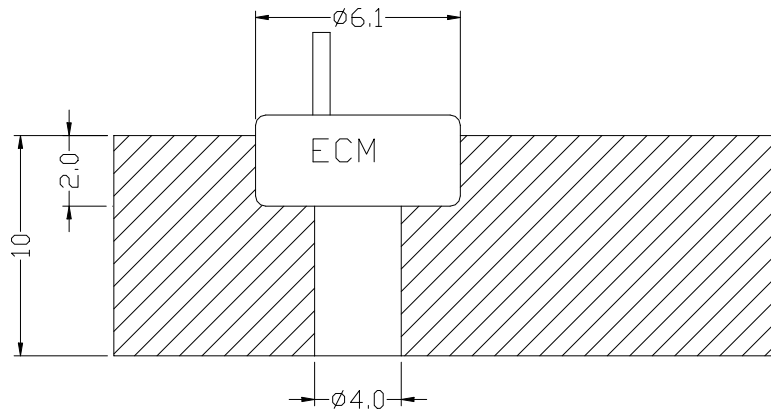
7-6 静电容易破坏麦克风必须采取措施避免（电烙铁接地，戴静电环等。）

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



7-8 固定部孔形状 Shape of hole at fixed part



unit:mm