



SOUND EFFECT

M09



8 SOUNDS 9 KEYS

8 音效 9 鍵 IC

FEATURES 功能敘述

- 8 different electronic sounds.
- 3 sound effect : Tone, Boom and Noise.
- K9 : Scan key.

	M09	M09K	M09CA	M09RC
K1	RIFLE	RIFLE	EXPLOSION	MELODY*
K2	RIFLE (ECHO)	RIFLE (ECHO)	POLICE CAR	FIRE ENGINE
K3	TV GAME	TV GAME	FIRE ENGINE	AMBULANCE
K4	DUAL TONE	DUAL TONE	AMBULANCE	POLICE CAR
K5	BOMB 1	MELODY	CAR ENGLINE	HORN
K6	BOMB 2	MELODY	TRUMP	ENGINE
K7	GUN 1	MELODY	MELODY*	REVERSE
K8	GUN 2	MELODY	MELODY*	MELODY*
K9	SCAN	SCAN	SCAN	SCAN
Fosc	≅ 128KHz	≅ 128KHz	≅ 64KHz	≅ 64KHz
Rosc	≅ 150KΩ	≅ 150KΩ	≅ 300KΩ	≅ 300KΩ

APPLICATION 產品應用

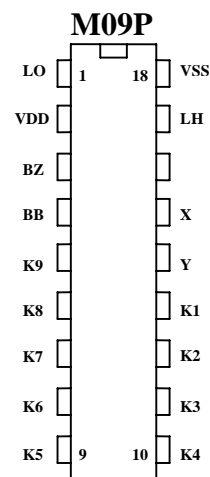
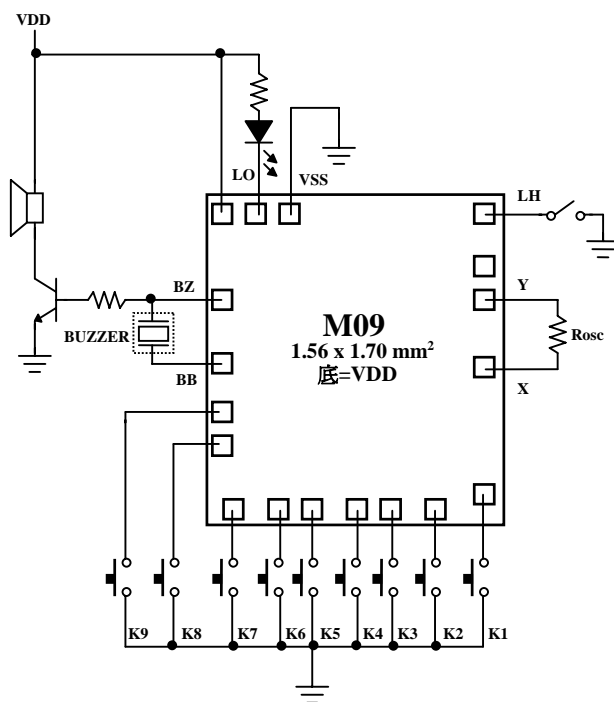
- Alarm system , Toys, Key chain.

ELECTRICAL CHARACTERISTICS 電氣規格

(@V_{DD}=3V unless otherwise specified)

Characteristics	Sym.	Min.	Typ.	Max.	Unit	REMARKS
工作電壓 Operating Voltage	V _{DD}	—	3	4.5	V	
工作電流 Operating Current	I _{OP}	—	0.1	0.5	mA	No load
靜態電流 Quiescent Current	I _{SB}	—	1	5	μA	
推動電流 BZ Driving Current	I _O	1	—	—	mA	@V _{DS} =1V
推動電流 LO Driving Current	I _{OL}	6	—	—	mA	@V _{DS} =1.2V
振盪頻率 Oscillator Frequency	F _{OSC}	—	128	—	KHz	External±30% , Rosc=150KΩ
工作溫度 Operating Temperature	Temp.	0	25	60	°C	

APPLICATION DIAGRAM 參考電路圖



*All specs and applications shown above subject to change without prior notice.

(以上電路及規格僅供參考,本公司得逕行修正)



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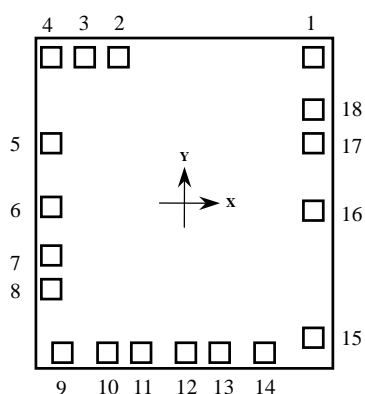
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PAD ASSIGNMENT & POSITION



UNIT : um

No.	NAME	X	Y
1	LH	652	720
2	VSS	-316.8	720
3	LED	-484.8	720
4	VDD	-652.8	720
5	BZ	-652.8	334.4
6	BB	-652.8	-11.2
7	K9	-652	-271.2
8	K8	-652	-431.2
9	K7	-609.6	-724
10	K6	-373.6	-724
11	K5	-213.6	-724
12	K4	22.4	-724
13	K3	182.4	-724
14	K2	418.4	-724
15	K1	652	-648
16	X	652	-39.2
17	Y	652	307.2
18	TEST	652	467.2

* CHIP SIZE ~ 1.56 X 1.70 mm²

* IC substrate should be connected to VDD in PCB (PCB 上 IC 必須接 VDD)

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