



## GENERAL DESCRIPTION 功能敘述

The M80002-4 is a CMOS ASIC designed for XMAS light controller use.

The M80002-4 blinks the 4 strings of lights.

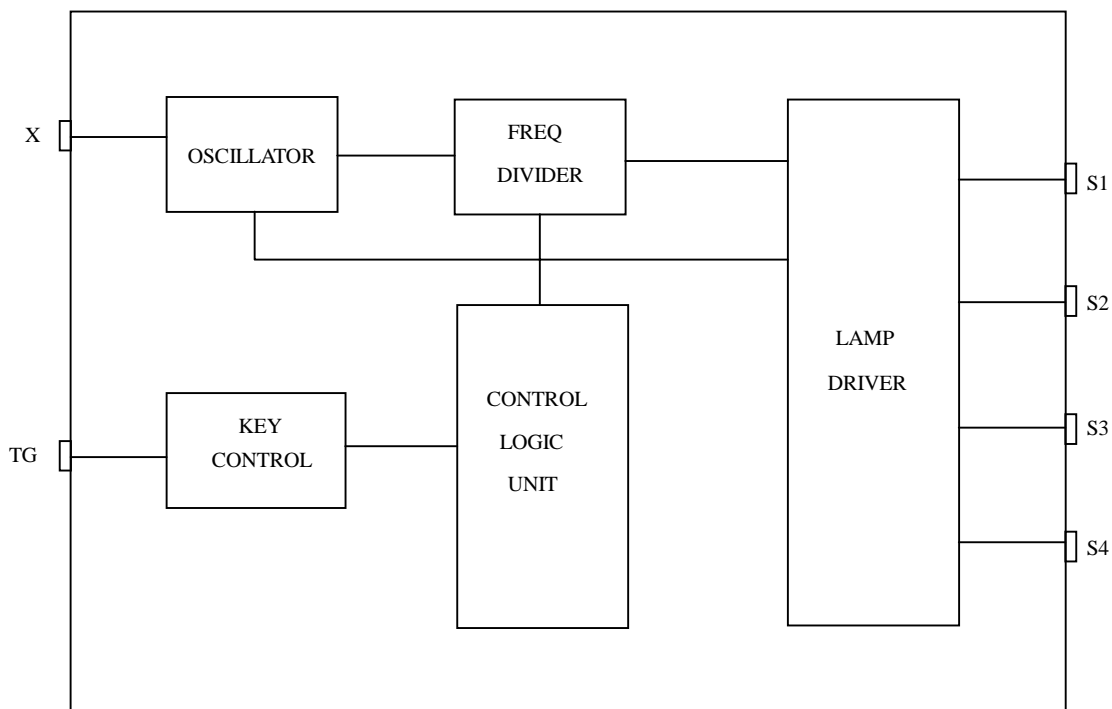
## FEATURES 產品特長

- Power supply range : 2.5~4.5V
- Direct 4 SCR outputs
- 8 sections of flash rate

## APPLICATIONS 產品應用

- XMAS light controller, any AC controlled device etc..

## BLOCK DIAGRAM 功能方塊圖



\*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 )



### ABSOLUTE MAXIMUM RATING

(TA=25°C)

Parameter	Rating	Unit
Supply Voltage	-0.3 to 5.0	V
Input Voltage	-0.2~V <sub>DD</sub> +0.2	V
Operating Temperature	0 to 60	°C
Storage Temperature	-25 to 125	°C

### ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	Sym.	Min.	Typ.	Max.	Unit	CONDITIONS
Operating Voltage	V <sub>DD</sub>	—	3.6	5	V	
Operating Current	I <sub>OP</sub>	—	—	—	μA	No load
Quiescent Current	I <sub>SB</sub>	—	0.2	0.5	mA	@V <sub>DS</sub> =1.2V
S1~S4 Drive Current	I <sub>OH</sub>	100	—	—	μA	
Switch Input Current	I <sub>IL</sub>	—	—	30	μA	
Input Voltage	V <sub>IH</sub>	V <sub>DD</sub> -0.2	V <sub>DD</sub>	V <sub>DD</sub>	V	
	V <sub>IL</sub>	V <sub>SS</sub>	V <sub>SS</sub>	V <sub>SS</sub> +0.2		
Oscillator Frequency	F <sub>OSC</sub>	—	150	—	KHz	External±30%

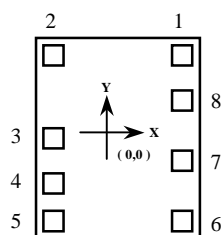
### PIN DESCRIPTION

NO.	NAME	DESCRIPTION
1	VSS	NEGATIVE POWER SUPPLY
2	X	OSCILLATOR INPUT PIN
3	TG	SPEED SELECT PIN
4	VDD	POSITIVE POWER SUPPLY
5	S1	SCR1 DRIVER PIN
6	S2	SCR2 DRIVER PIN
7	S3	SCR3 DRIVER PIN
8	S4	SCR4 DRIVER PIN



XMAS LIGHT CONTROL
M80002-4

**PAD ASSIGNMENT & POSITION**



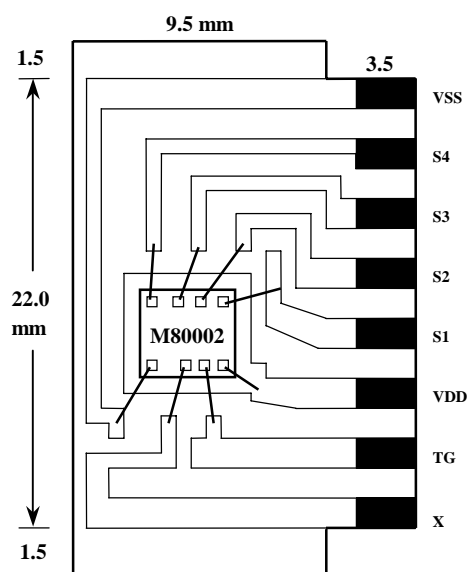
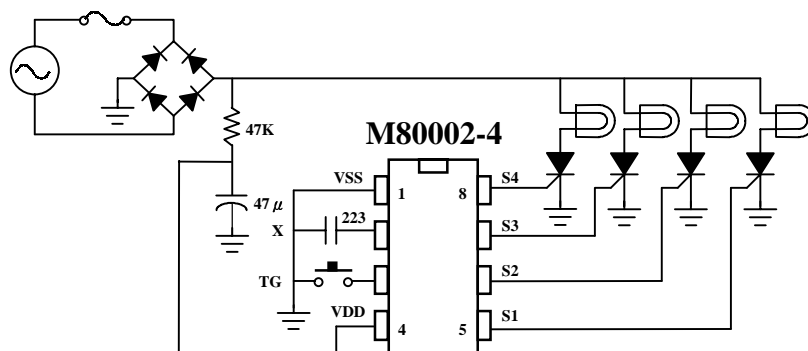
No.	NAME	X	Y
1	S4	312	460
2	VSS	-315	460
3	X	-316	-42
4	TG	-316	-242
5	VDD	-316	-460
6	S1	312	-460
7	S2	312	-120
8	S3	312	205

\* CHIP SIZE ~ 1.1x1.4mm<sup>2</sup>

\* IC substrate should connected to VDD in PCB ( PCB 上 IC 底座必須接 VDD )



APPLICATION DIAGRAM 參考電路圖



PIN 寬 : 1.27 mm  
PIN 距 : 1.27 mm  
板厚度 : 1.6 mm