



一華半導體股份有限公司
MOSDESIGN SEMICONDUCTOR CORP.

TAIPEI : TEL : 886-2- 22783733
FAX : 886-2- 22783633
H.K. TEL : 852- 27569109
FAX : 852- 27566961

SYNC
RGB LED IC

同步
三色燈 LED IC

LED FLASH	
M1348	

FEATURES 功能敘述

Totally 15 operation mode.

Built-in oscillator.

SP : 2 speed select pin.

Available in 8-pin , 16 pin SOP package.

Power-on while automatic synchronous an LEDS of the same color.

Can be cascaded in daisy chain fashion in wave of the different color.

OPT : N-channel open drain output. / P-channel open drain output select pin.

P/N

FUNCTION

M1348A	11 種起始位址	七彩漸明漸暗+紅色系漸明漸暗
M1348B	6 種起始位址	同步同色順序跳閃+同步同色跳閃+6 色漸明漸暗
M1348C	6 種起始位址	6 色漸明漸暗(飄)+6 色同步漸明漸暗
M1348D	6 種起始位址	同步 6 色跳閃+同步同色跳閃+6 色漸明漸暗
M1348E	7 種起始位址	七彩漸明漸暗(快速)
M1348F	1 種起始位址	RGB 跳閃+RG、GB、BR 跳閃+七彩漸明漸暗

APPLICATION 產品應用

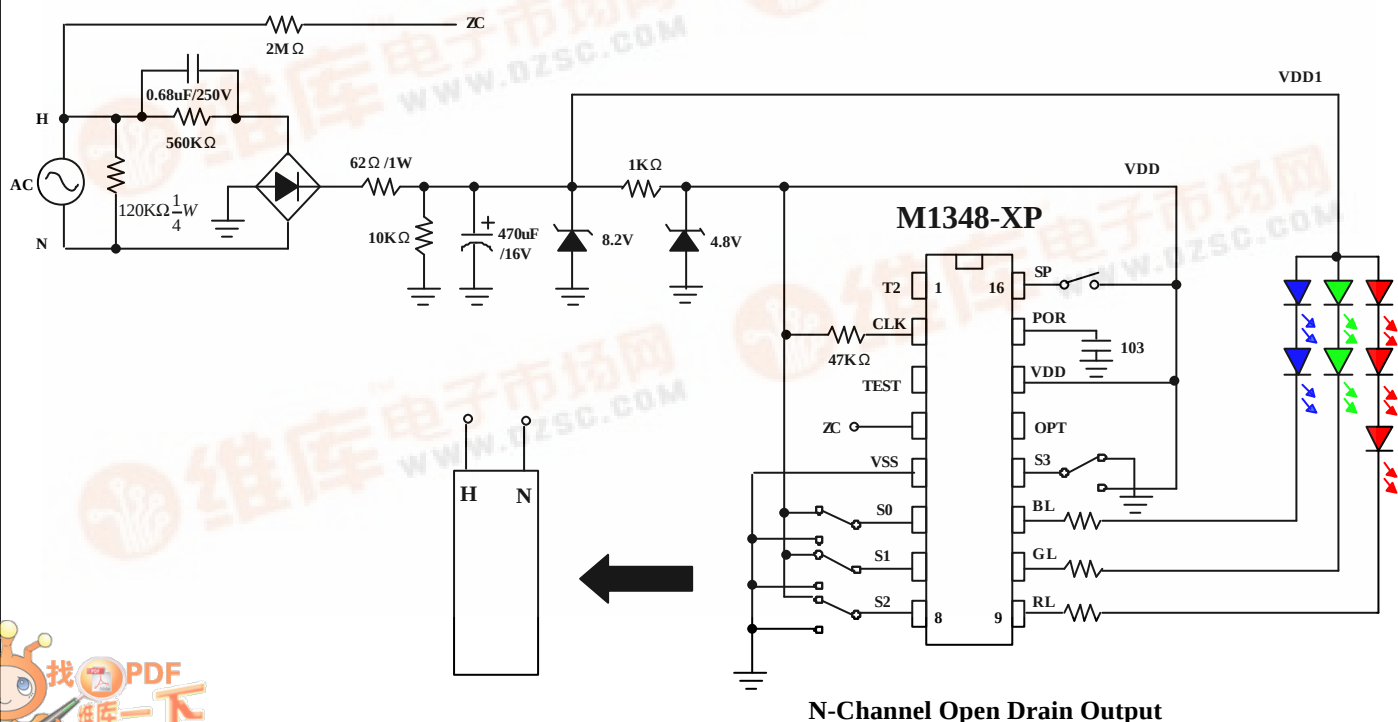
LED color mixer lamp etc..

ELECTRICAL CHARACTERISTICS 電氣規格

(@V_{DD}=4.5V unless otherwise specified)

Characteristics	Sym.	Min.	Typ.	Max.	Unit	REMARKS
工作電壓 Operating Voltage	V _{DD}	—	4.5	5.5	V	
工作電流 Operating Current	I _{OP}	—	0.5	—	mA	No load
推動電流 Driving Sink Current	I _{OL}	20	—	—	mA	@V _{DS} = 1.2 V
推動電流 Driving Source Current	I _{Oh}	5	—	—	mA	@V _{SD} = 1.2 V
振盪頻率 Oscillator Frequency	F _{LED}	—	450	—	KHz	±30% TOL.
工作溫度 Operating Temperature	Temp.	0	25	60		

APPLICATION DIAGRAM 參考電路圖





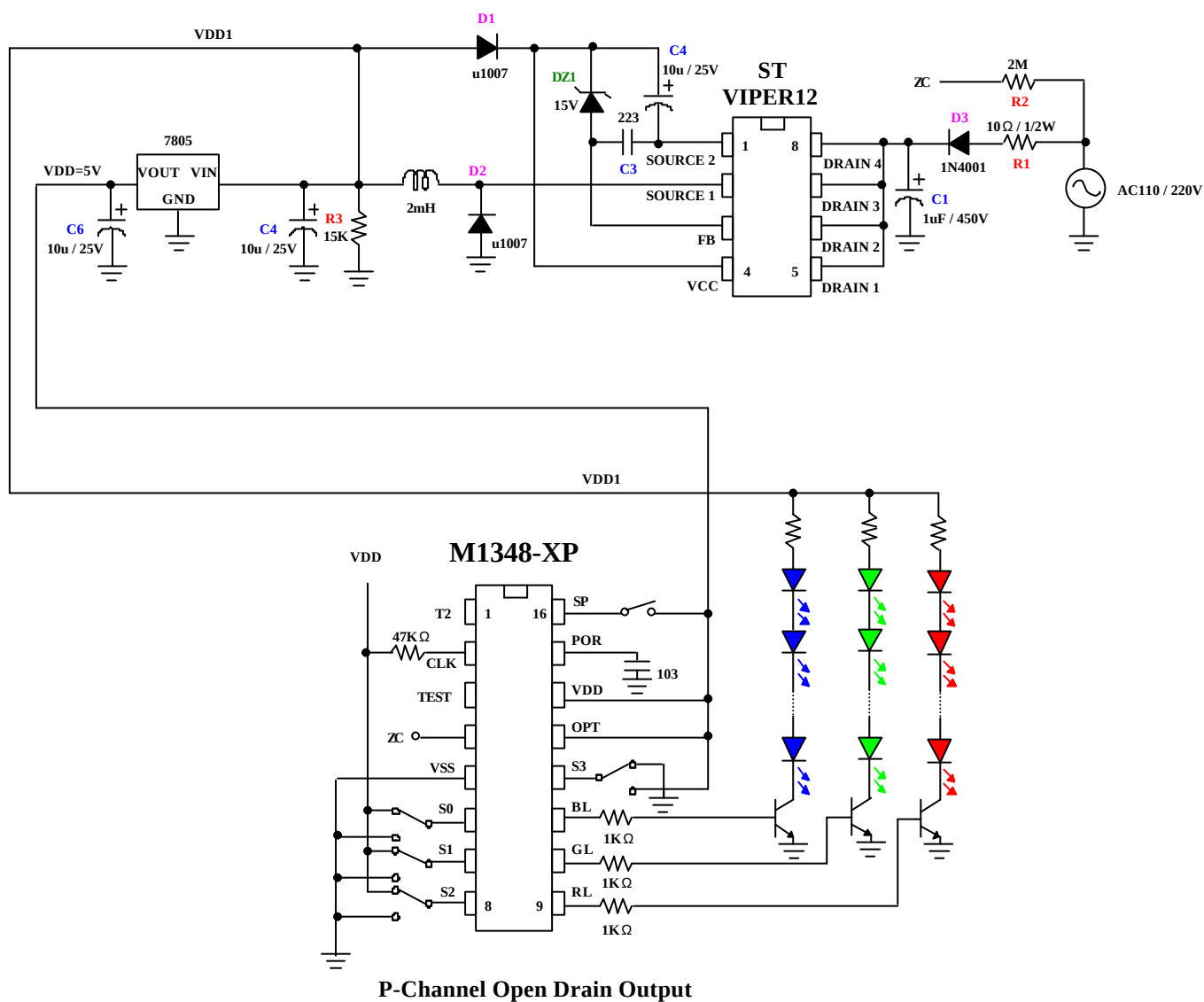
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LED FLASH	
M1348	



*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)

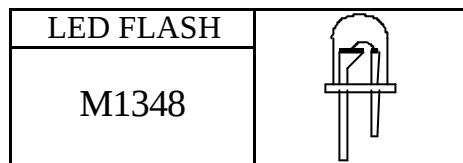


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SYNC
RGB LED IC

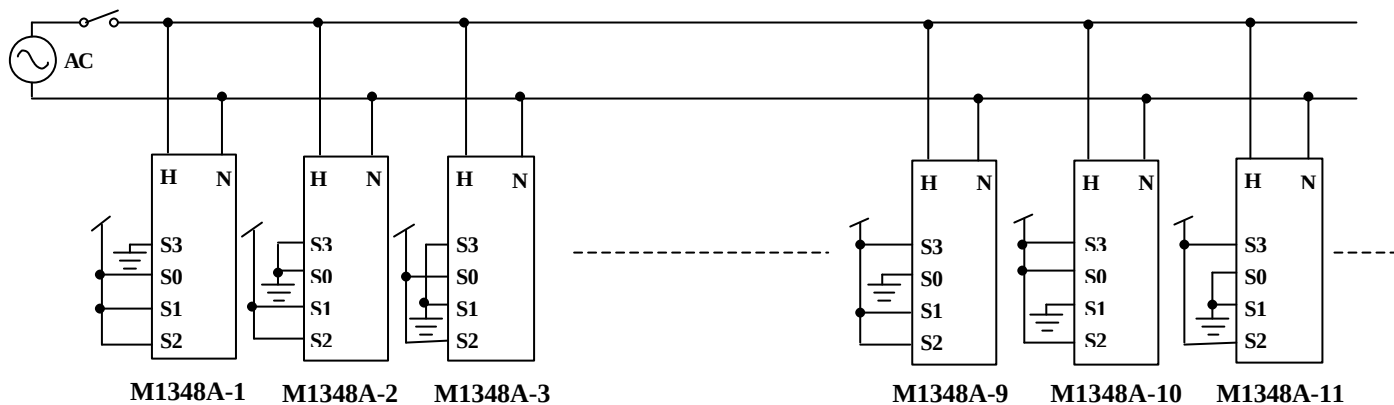
同步
三色燈 LED IC



* M1348A : 七彩漸明漸暗+紅色系漸明漸暗

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348A-1	1	VDD	VDD	VDD	VSS	Red	紅
M1348A-2	2	VSS	VDD	VDD	VSS	Orange	橙
M1348A-3	3	VDD	VSS	VDD	VSS	Yellow	黃
M1348A-4	4	VSS	VSS	VDD	VSS	Green	綠
M1348A-5	5	VDD	VDD	VSS	VSS	Blue	藍
M1348A-6	6	VSS	VDD	VSS	VSS	Indigo	靛
M1348A-7	7	VDD	VSS	VSS	VSS	Violet	紫
M1348A-8	8	VSS	VSS	VSS	VSS	White	白
M1348A-9	9	VSS	VDD	VDD	VDD	Pink	桃紅
M1348A-10	10	VDD	VSS	VDD	VDD	Red	紅
M1348A-11	11	VSS	VSS	VDD	VDD	Pink	桃紅

SP : = Open (One Cycle about 300 Sec at AC 60Hz.)
= VDD (One Cycle about 150 Sec at AC 60Hz.)



PATTERN :

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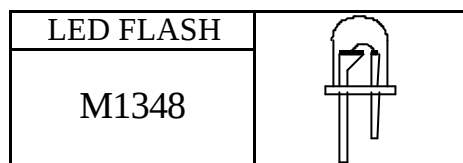


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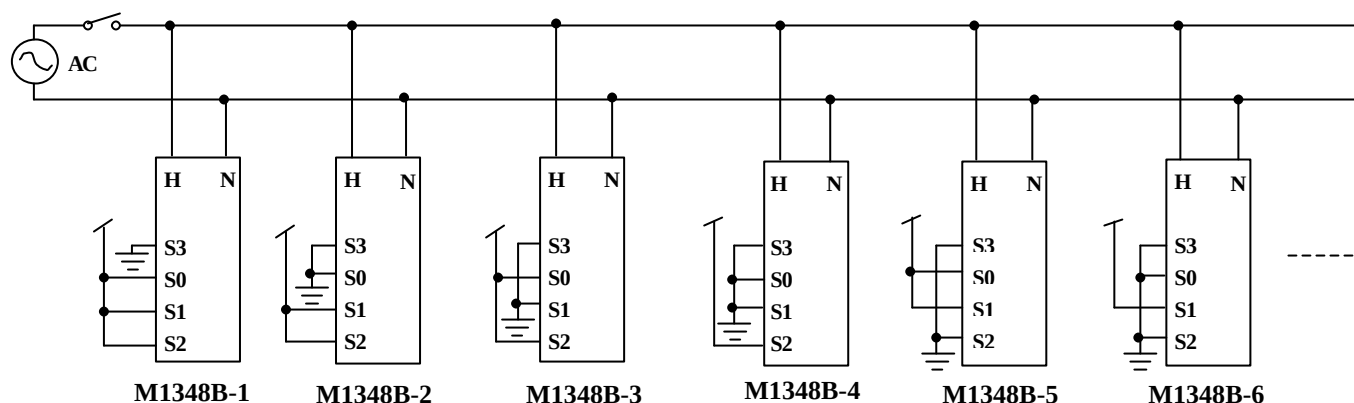
同步
三色燈 LED IC



* M1348B : 同步同色順序跳閃+同步同色跳閃+6 色漸明漸暗

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348B-1	1	VDD	VDD	VDD	VSS	Red	紅
M1348B-2	2	VSS	VDD	VDD	VSS	Orange	橙
M1348B-3	3	VDD	VSS	VDD	VSS	Green	綠
M1348B-4	4	VSS	VSS	VDD	VSS	Blue	藍
M1348B-5	5	VDD	VDD	VSS	VSS	Indigo	靛
M1348B-6	6	VSS	VDD	VSS	VSS	Pink	桃紅

SP : = Open (One Cycle about 74 Sec at AC 60Hz)
= VDD (One Cycle about 39 Sec at AC 60Hz)



PATTERN :

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	同步同色順序跳閃						同步同色跳閃					6 色漸明漸暗				

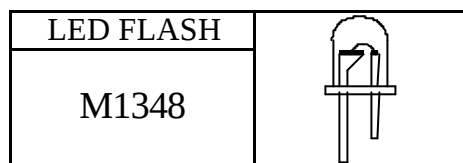


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SYNC
RGB LED IC

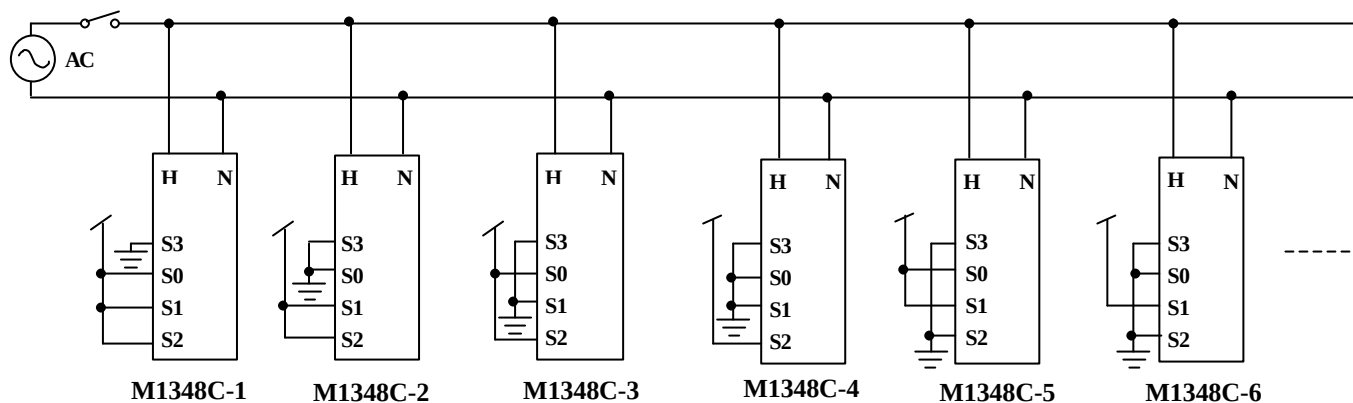
同步
三色燈 LED IC



* M1348C : 6 色漸明漸暗(飄)+ 6 色同步漸明漸暗

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348C-1	1	VDD	VDD	VDD	VSS	Indigo	靛
M1348C-2	2	VSS	VDD	VDD	VSS	Pink	桃紅
M1348C-3	3	VDD	VSS	VDD	VSS	Red	紅
M1348C-4	4	VSS	VSS	VDD	VSS	Yellow	黃
M1348C-5	5	VDD	VDD	VSS	VSS	Green	綠
M1348C-6	6	VSS	VDD	VSS	VSS	Blue	藍

SP : = Open (One Cycle about 47 Sec at AC 60Hz.)
= VDD (One Cycle about 23 Sec at AC 60Hz.)



PATTERN :

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6 色漸明漸暗(飄)												6 色同步漸明漸暗							

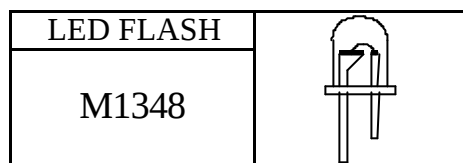


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SYNC
RGB LED IC

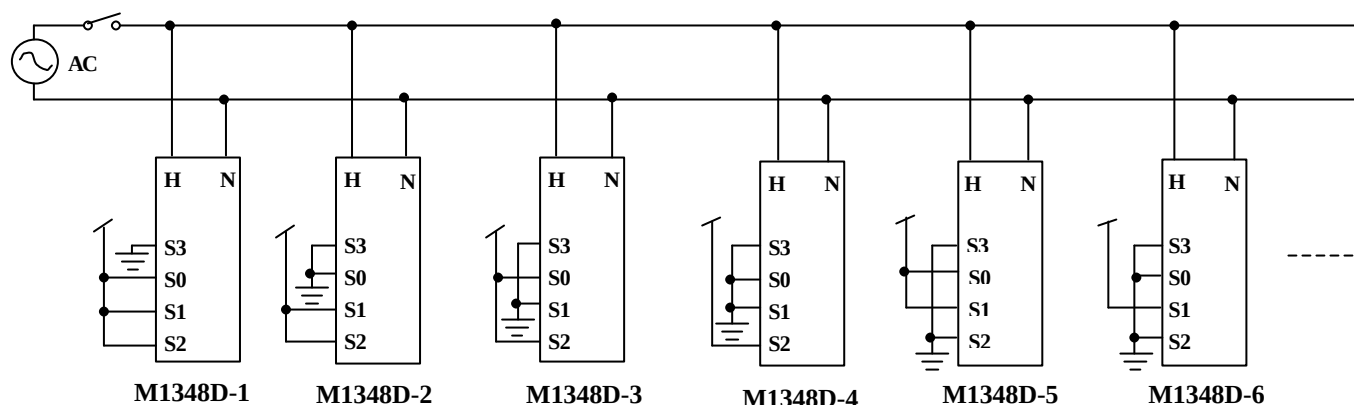
同步
三色燈 LED IC



* M1348D : 同步 6 色跳閃+同步同色跳閃+ 6 色漸明漸暗

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348D-1	1	VDD	VDD	VDD	VSS	Red	紅
M1348D-2	2	VSS	VDD	VDD	VSS	Orange	橙
M1348D-3	3	VDD	VSS	VDD	VSS	Green	綠
M1348D-4	4	VSS	VSS	VDD	VSS	Blue	藍
M1348D-5	5	VDD	VDD	VSS	VSS	Indigo	靛
M1348D-6	6	VSS	VDD	VSS	VSS	Pink	桃紅

SP : = Open (One Cycle about 74 Sec at AC 60Hz)
= VDD (One Cycle about 38 Sec at AC 60Hz)



PATTERN :

1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3			●	●	●	●	●	●	●	●	●	●	●	●	●	●
4				●	●	●	●	●	●	●	●	●	●	●	●	●
5					●	●	●	●	●	●	●	●	●	●	●	●
6					●	●	●	●	●	●	●	●	●	●	●	●
	同步 6 色跳閃					同步同色跳閃					6 色漸明漸暗					

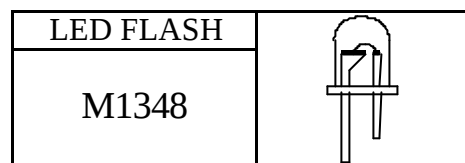


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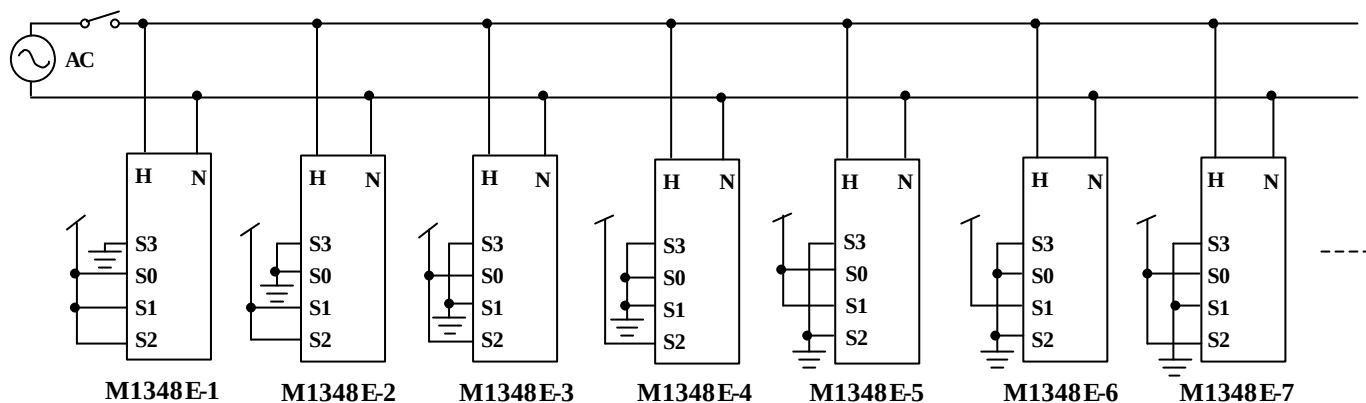
同步
三色燈 LED IC



* M1348E : 七彩漸明漸暗(快速)

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348E-1	1	VDD	VDD	VDD	VSS	Red	紅
M1348E-2	2	VSS	VDD	VDD	VSS	Yellow	黃
M1348E-3	3	VDD	VSS	VDD	VSS	Green	綠
M1348E-4	4	VSS	VSS	VDD	VSS	Blue	藍
M1348E-5	5	VDD	VDD	VSS	VSS	Indigo	靛
M1348E-6	6	VSS	VDD	VSS	VSS	White	白
M1348E-7	7	VDD	VSS	VSS	VSS	Pink	桃紅

SP : = Open (One Cycle about 35 Sec at AC 60Hz.)
= VDD (One Cycle about 17 Sec at AC 60Hz.)



PATTERN :

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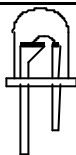


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SYNC
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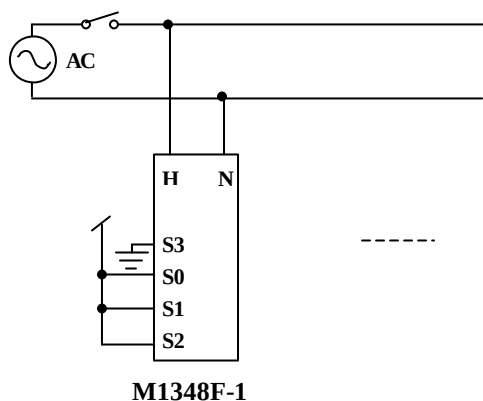
同步
三色燈 LED IC

LED FLASH	
M1348	

* M1348F : RGB 跳閃 + RG、GB、BR 跳閃 + 七彩漸明漸暗

P/N	MODE	S0	S1	S2	S3	COLOR	
M1348F-1	1	VDD	VDD	VDD	VSS	Red	紅

SP : = Open (One Cycle about 128 Sec at AC 60Hz)
= VDD (One Cycle about 65 Sec at AC 60Hz)



PATTERN :

1													
	RGB 跳閃(3 次)			RG、GB、BR 跳閃 3 次			七彩漸明漸暗(3 次)						



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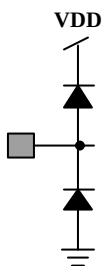
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LED FLASH	
M1348	

OSC PSRR :

VDD (V)	Fosc (KHz)
2.0	319.5
2.5	383.2
3.0	400.0
3.5	411.3
4.0	418.0
4.5	422.0
5.0	420.4

INPUTS PROTECTION :



OUTPUTS PROTECTION :

