

Usable light range ~1000 Lux

### Features:

- RoHS compliant and complete CdS replaceable
- Current output highly linear VS light level
- Integrated high gain photo-current amplifier
- Dark-current cancellation
- Temperature stable



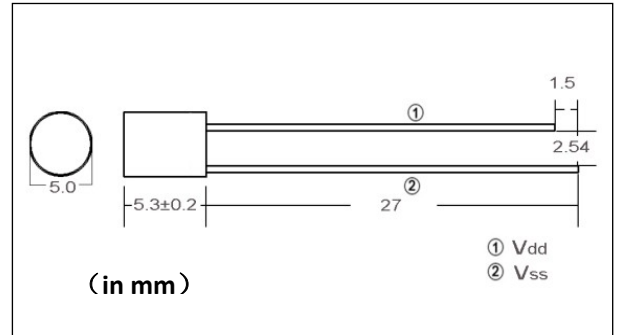
### Applications:

- Dawn/dusk sensing
- Surveillance Camera
- Display backlighting in LCD monitors
- Street light

### Absolute Maximum Ratings:

Parameter	Rating	Unit
Supply Input Voltage	-0.5 to 7	V
Permissible power dissipation	70	mW
Operating Temperature, Topr	-30°C to +85°C	°C
Storage Temperature, Tstg	-40°C to +100°C	°C
Soldering temperature ( 10 s ) Tsol	260	°C

### Package outline (Scale 1:1)



### Electrical Specification:

The following parameters apply over the operating temperature -40°C+ 85°C, and with R<sub>ss</sub>=1K Ohms, V<sub>dd</sub>=5V, as per Figure 1

Parameter	Symbol	Min	Typ	Max	Units	Test Conditions
Infra Red Response			1	5	% of peak	900 nm
Minimum Operational Voltage	V <sub>dd</sub> -V <sub>ss</sub>		1.8		V	I <sub>ss</sub> =250uA
			1.3		V	I <sub>ss</sub> =50uA
Light Current +/- 50%	I <sub>ss</sub>	1600	2500	3400	uA	1000Lux
		130	260	390	uA	100Lux
		12.5	25	37.5	uA	10Lux
Dark Current	I (dark)		150		nA	0 Lux, Ta=25°C
Gain Linearity		-80	100	120	%	
Peak Spectral Response			550		nm	
Sensitive Area			0.27*0.21		mm <sup>2</sup>	

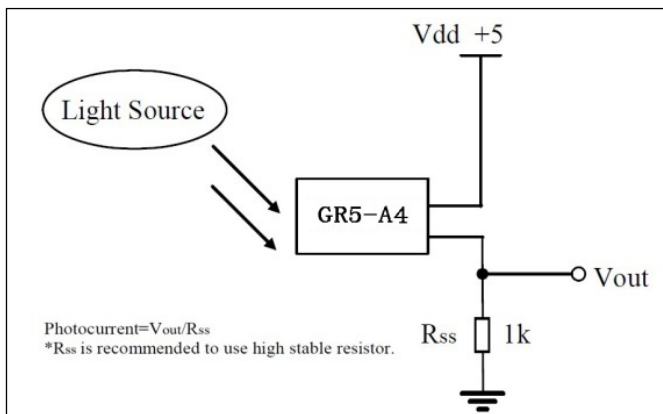
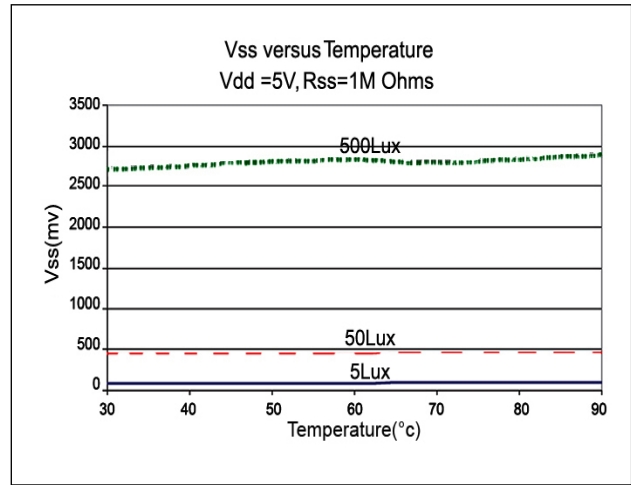
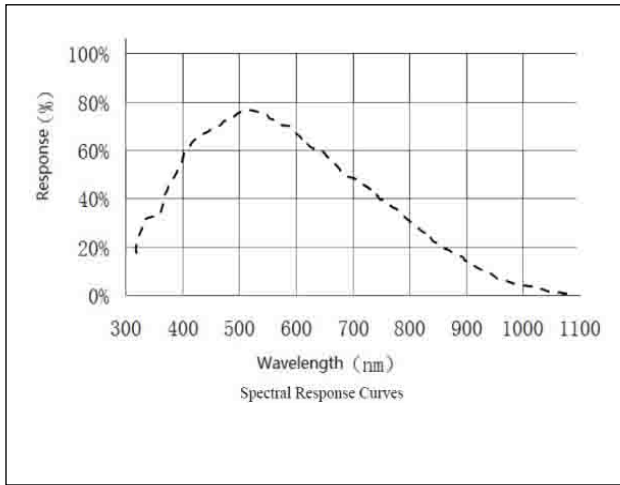


Figure 1: Test Circuit

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Diagram:



Note that with a lower RSS resistance, the linear light response range can be greatly increased up to 6000 Lux.

