# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# Visible Light Photo Reflector

Product No: MTRS5750

#### Peak Emission Wavelength: 574nm

The 574nm reflective sensor consists of a 574nm visible emitter and high sensitivity photo transistor in the same package. The black molded housing reduces the effect of external ambient light. Custom emitter/ detectors are available.

#### FEATURES

- > High Reliability
- > Compact ( $\Phi$ 4.0)
- > Short Detection Distance Optimum 0.5-1.5mm
- APPLICATIONS
- > Card Reader
- > Bar-code Reader
- > Edge Sensing / Money-bill Reader



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#### Absolute Maximum Ratings (Ta=25°C)

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ITEMS	SYMBOL	RATINGS	UNIT	lead-free Rono
Forward Current (LED)	IF	30	mA	
Pulse Forward Current (LED)*1	IFP	0.1	A	
Reverse Voltage (LED)	VR	5	V	
Power Dissipation (LED)	PD	80	mW	
Collector-Emitter Voltage (PT)	Vce	20	V	
Emitter-Collector Voltage (PT)	Vec	5	V	
Collector Current (PT)	lc	50	mA	
Collector Power Dissipation (PT)	PC	75	mW	
Total Power Dissipation	Ptot	100	mW	
Operating Temperature Range	Topr	-20 ~ +80	°C	*1: Tw=10µsec, T=10msec.

#### Electrical & Optical Characteristics ( $Ta = 25^{\circ}C$ )

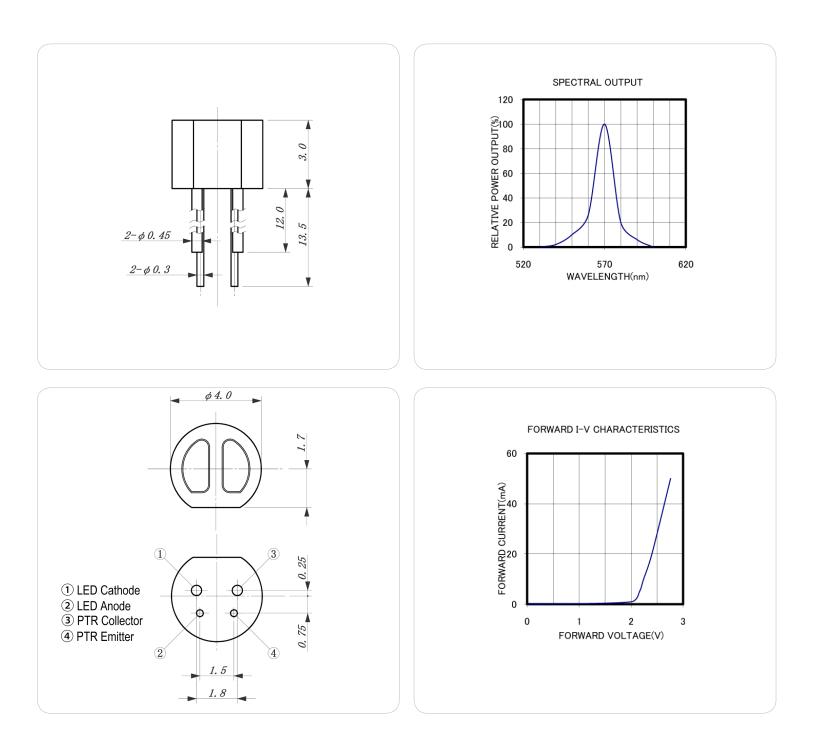
ITEMS	SYMBOL	CONDITIONS	MIN	ТҮР	MAX	UNIT			
Forward Voltage	VF	IF=20mA		2.4	2.8	V			
Reverse Current	IR	VR=5V			10	μA			
Peak Emission Wavelength	λρ	IF=20mA		574		nm			
Spectral Line Half Width	Δλ	IF=20mA		11		nm			
Dark Current (Iceo)	ID	Vce=10V			100	nA			
Output Current	lo	IF=20mA, Vce=10V, d=1mm *	50	150		μA			
Cross-talk Current	lx	IF=20mA, Vce=10V			1.0	nA			
Rise Time (10 to 90%)	Tr	Vcc=5V, Io=0.1mA, RL=1KΩ		20		μS			
Fall Time (10 to 90%)	Tf	Vcc=5V, lo=0.1mA, RL=1KΩ		30		μS			
Lead Soldering Temperature*2	Tls				260	°C			

\*1: Measured by reflecting with Aluminum evaporated mirror (d=1.00mm). \*2: Time 5 Sec max, Position: Up to 3mm from the body.



### Visible Light Photo Reflector

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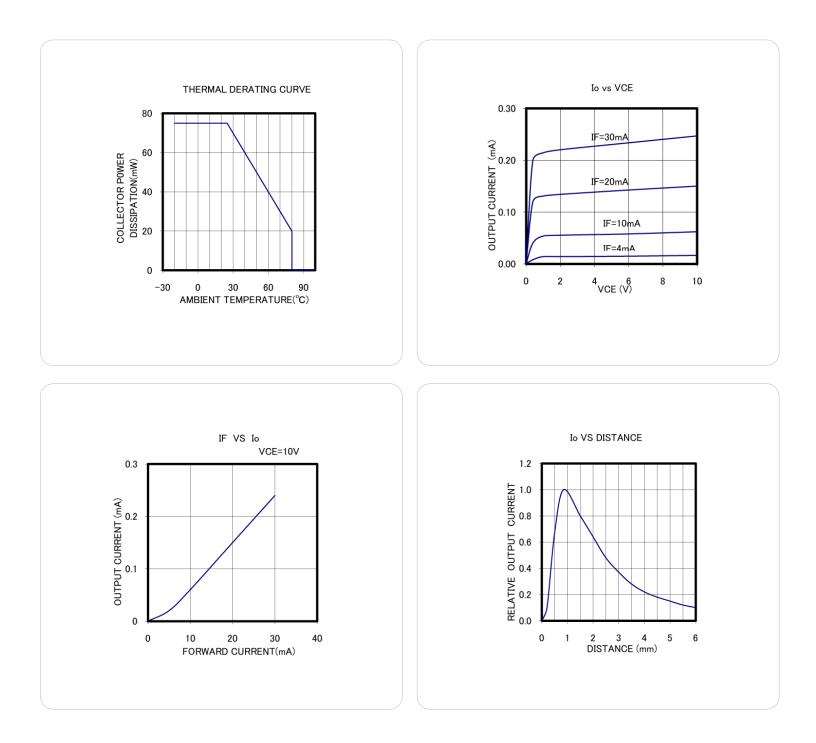
Unit: mm, Tolerance: ±0.2

2011-08-11



## Visible Light Photo Reflector

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The information contained herein is subject to change without notice.

2011-08-11

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