# 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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## Visible Light Photo Reflector

Product No: MTRS5750D

#### Peak Emission Wavelength: 574nm

The 574nm reflective sensor consists of a 574nm visible emitter and high sensitivity photo diode 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



Ph a

\*1: Tw=10µsec, T=10msec.

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

	- J - (	/		
ITEMS	SYMBOL	RATINGS	UNIT	lead-free RoH
Forward Current (LED)	IF	30	mA	
Pulse Forward Current (LED)*1	IFP	50	mA	
Reverse Voltage (LED)	VR	5	V	
Power Dissipation (LED)	PD	100	mW	
Reverse Voltage (PD)	VR	30	V	
Power Dissipation (PD)	PD	75	mW	
Total Power Dissipation	Ptot	100	mW	
Operating Temperature Range	Topr	-20 ~ +80	℃	
Storage Temperature Range	Tstg	-30 ~ +100	℃	

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

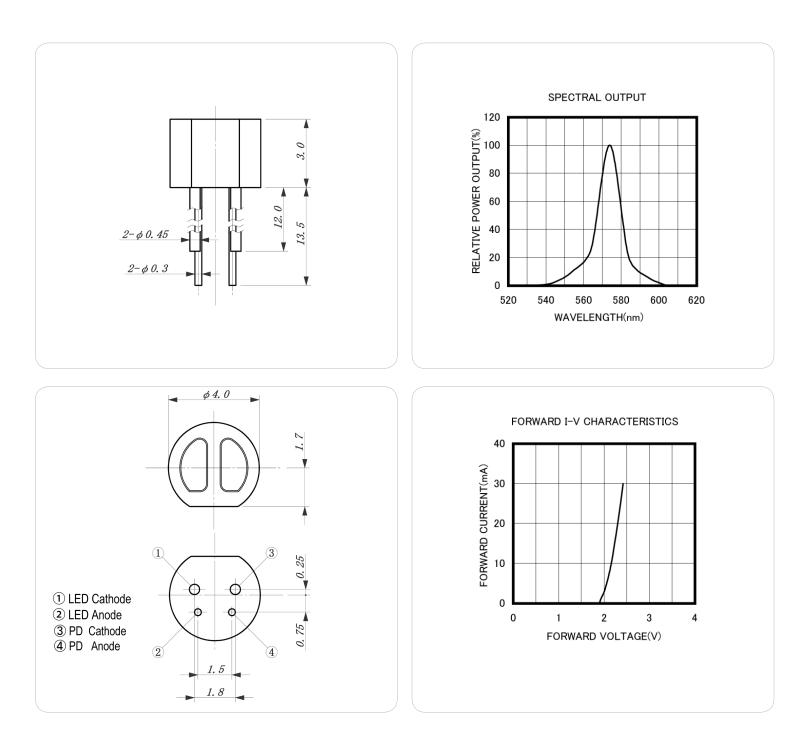
	• • • • • • • • • •					
ITEMS	SYMBOL	CONDITIONS	MIN	ТҮР	MAX	UNIT
Forward Voltage	VF	IF=20mA		2.4	2.8	V
Reverse Current	IR	VR=4V			10	μΑ
Peak Emission Wavelength	λρ	IF=20mA		574		nm
Spectral Line Half Width	Δλ	IF=20mA		11		nm
Dark Current (Iceo)	ID	VR=10V			100	nA
Output Current	lo	IF=20mA, VR=10V, d=1mm *		0.18		μΑ
Cross-talk Current	lx	IF=20mA, VR=10V			10.0	nA
Rise Time (10 to 90%)	Tr	VR=10V, IF=20mA, RL=1KΩ		1.0		μS
Fall Time (10 to 90%)	Tf	VR=10V, IF=20mA, RL=1KΩ		1.0		μS
Lead Soldering Temperature*2	TIs				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

Product No: MTRS5750D



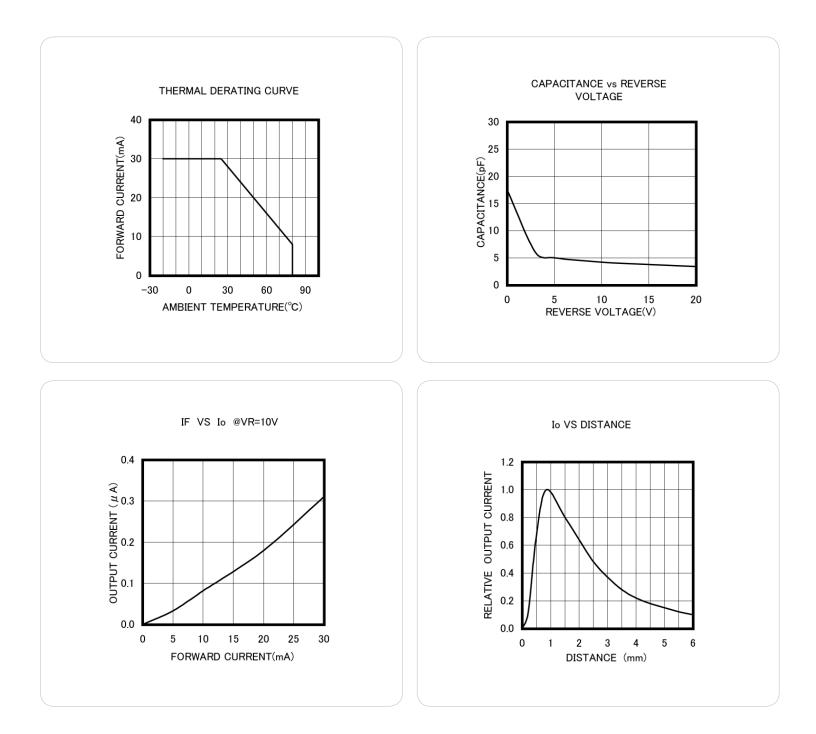
Unit: mm, Tolerance: ±0.2

Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com TOLL FREE:** 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com



## Visible Light Photo Reflector

Product No: MTRS5750D



The information contained herein is subject to change without notice.

2011-08-11