



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



## Peak Sensitivity Wavelength: 940nm

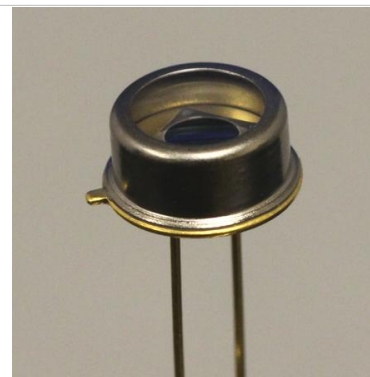
The MT03-001 is a circular ( $\varnothing 2.52$ ) 5mm<sup>2</sup> active area Photodiode in a hermetic TO-5 metal can package. It is well suited for applications requiring high sensitivity (Green/Blue) as well as visible-near IR applications.

### FEATURES

- > Ultra Low Noise
- > High Shunt Resistance
- > Wide Dynamic Range
- > Blue Enhanced

### APPLICATIONS

- > Colorimeters
- > Photometers
- > Spectroscopy Equipment
- > Fluorescence



## Absolute Maximum Ratings



ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	VR	50	V
Operating Temperature Range	Topr	-40 ~ +100	°C
Storage Temperature Range	Tstg	-55 ~ +125	°C
Lead Soldering Temperature*1	Tls	260	°C

\*1: Time 5 Sec max, Position: Up to 3mm from the body.

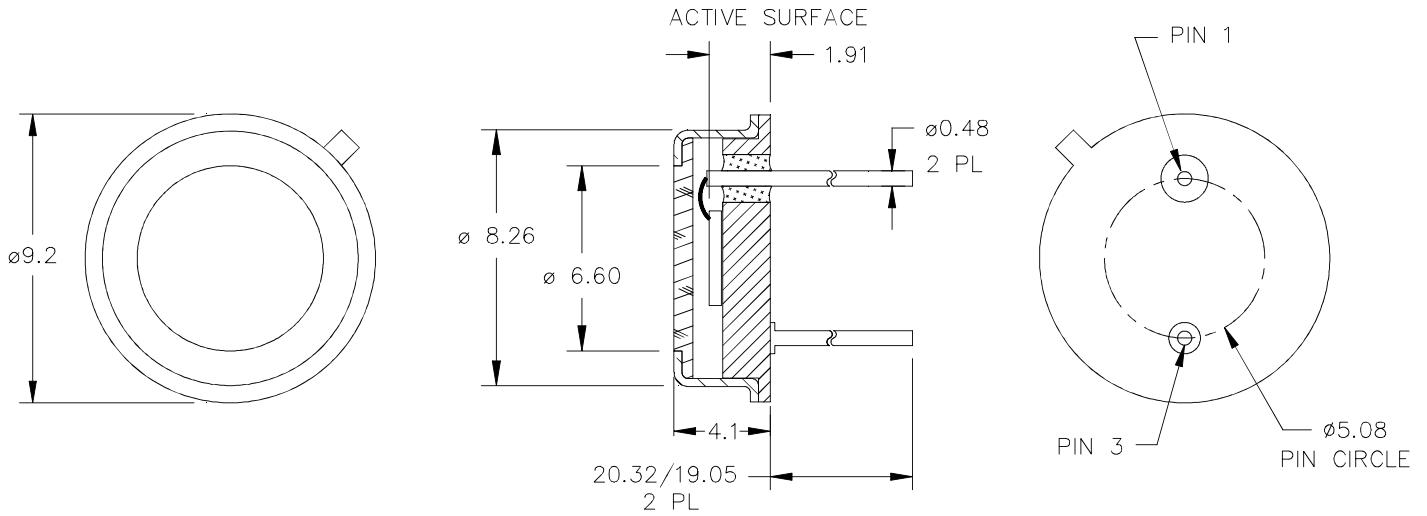
## Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Light Current	IL	*1, *2	--	--	10.0	mA
Dark Current	ID	VR=10V	--	--	1.0	nA
Spectral Sensitivity	$\lambda$	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	$\lambda_p$	--	--	940	--	nm
Responsivity	Rt	VR=0V, $\lambda=410\text{nm}$	--	0.22	--	A/W
Responsivity	Rt	VR=0V, $\lambda=940\text{nm}$	--	0.60	--	A/W
Response Time @410nm	Tr	RL=50 $\Omega$ , Vr=10V	--	2.0	--	nS
Junction Capacitance	Cj	at 1MHz, V=0V	--	65	70	pF
Junction Capacitance	Cj	at 1MHz, V=5V	--	14	18	pF
Shunt Resistance	Rs	Vr=10mV	400	600	--	m $\Omega$

\*1: Color Temperature=2870°K Standard Tungsten Lamp, \*2: VR=10V, Ee=5mW/cm<sup>2</sup>.

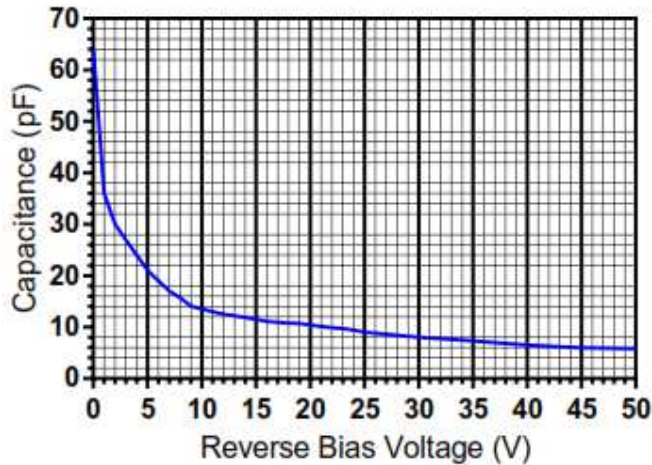


TO-5 Package Dimensions (2 Pin)

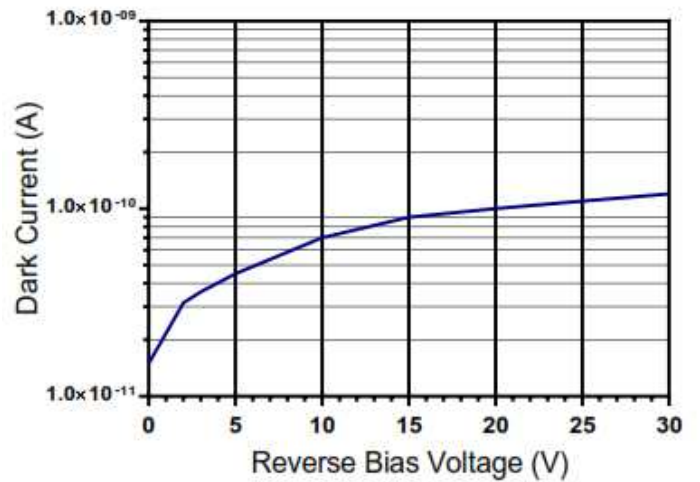


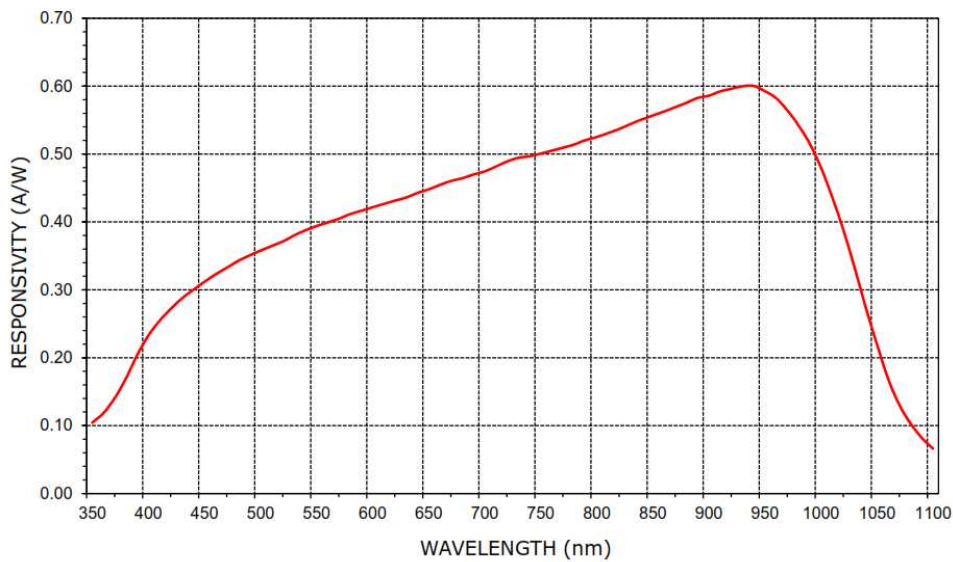
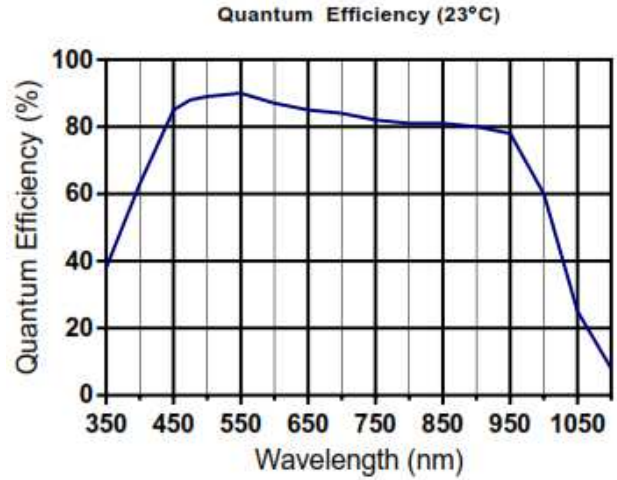
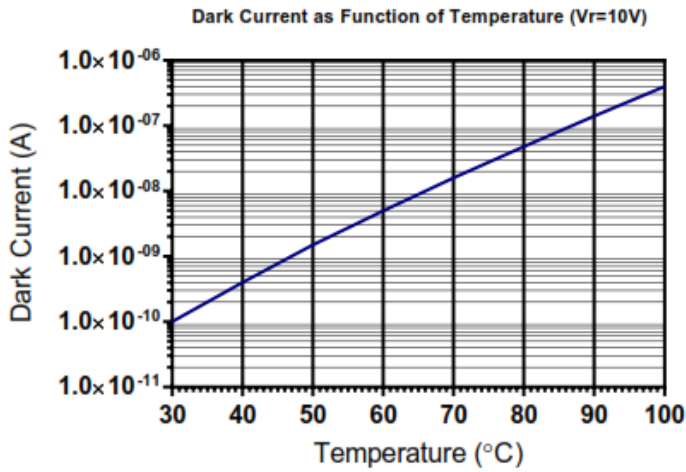
Unit: mm, Tolerance:  $\pm 0.2$

Capacitance as Function of Reverse Bias (23°C)



Dark Current as Function of Bias (23°C)





The information contained herein is subject to change without notice.

2016-04-29