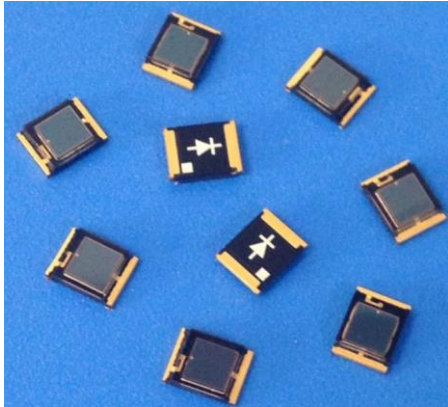


## Silicon photodiode

### OSD9-IM

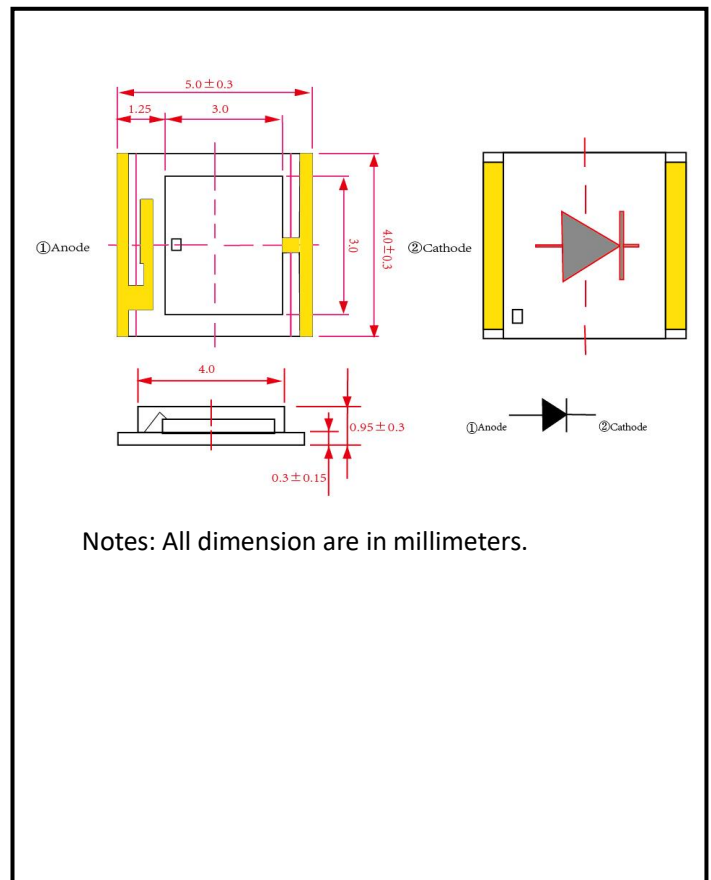


## Description

The OSD9-IM is IR response high-output, high-speed silicon Photo diode which is mounted in COB molding package, Permits wide angular response.

## Applications

- \*Laser detect
- \* Medical equipment



## Absolute Maximum Ratings (Ta=23°C)



Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Chip size	size	-	3.05*3.05			mm <sup>2</sup>
Active area	A	-	2.794*2.794			mm <sup>2</sup>
Dark current	I <sub>D</sub>	V <sub>R</sub> =100mV		15		pA
		V <sub>R</sub> =10V		25		
Rise time	t <sub>R</sub>	V <sub>R</sub> =0V; λ =635nm;R <sub>L</sub> =50Ω		80		ns
Tempcoeffi-cient of I <sub>D</sub>	T <sub>CD</sub>			0.18		times/°C
Reverse breakdown voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =100uA E <sub>v</sub> =0mw/cm <sup>2</sup>	35			V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V f=1MHz E <sub>e</sub> =0mW/cm <sup>2</sup>		70		pF
		V <sub>R</sub> =10V f=1MHz E <sub>e</sub> =0mW/cm <sup>2</sup>		25		
Photo sensitivity	S <sub>R</sub>	650nm		0.38		A/W
Spectral Application Range	λ range		350		1100	nm
Spectral Response-Peak	λ <sub>p</sub>			940		nm
Shunt resistance	R <sub>sh</sub>	V <sub>R</sub> =10mV		0.5		GΩ
Angular Resp 50% Resp Pt	θ <sup>1/2</sup>			±60		Degrees

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission.

Specifications are subject change without notice.

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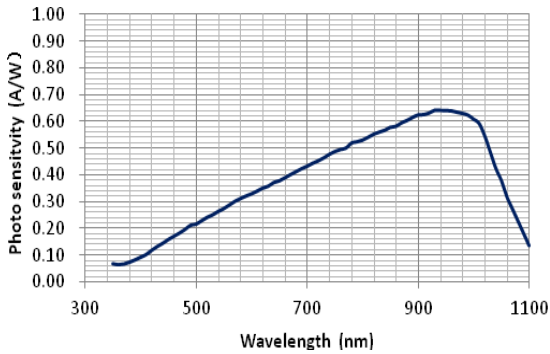
TEL:+86-21-54971821

FAX:+86-21-54971823

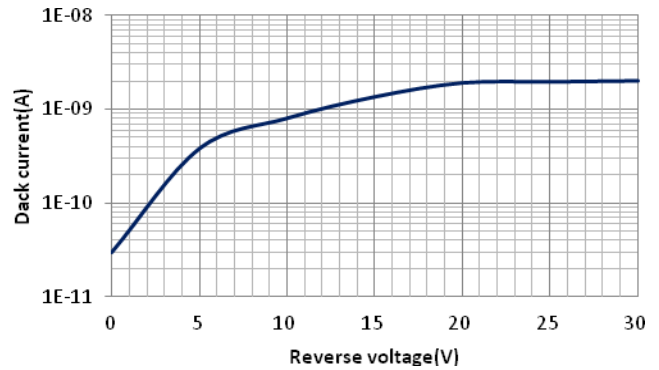
EMAL:frank.shuai@e-otron.com

<http://www.e-otron.com>

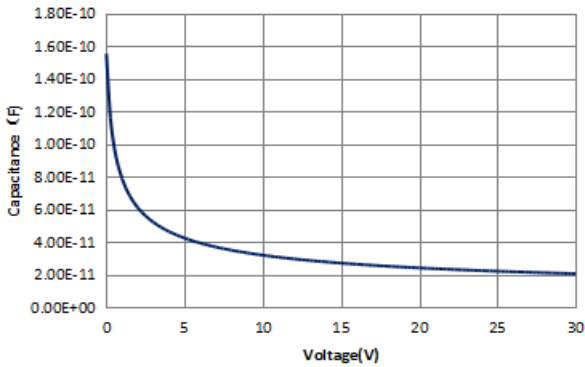
### SPECTRAL RESPONSE (Ta=23°C)



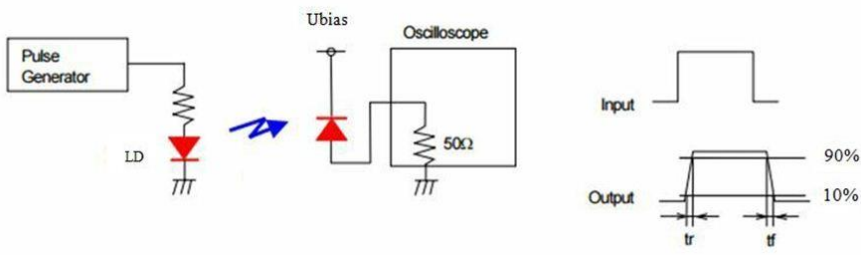
### DARK CURRENT VS. REVERSE VOLTAGE (Ta=23°C)



### CAPACITANCE VS. REVERSE VOLTAGE (Ta=23°C)



### \* Response Time Measure Circuit:



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