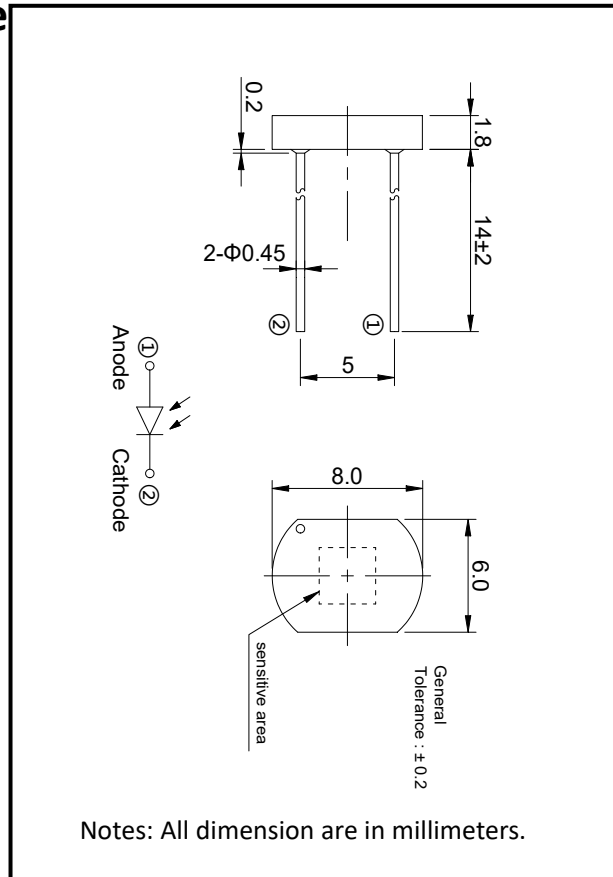
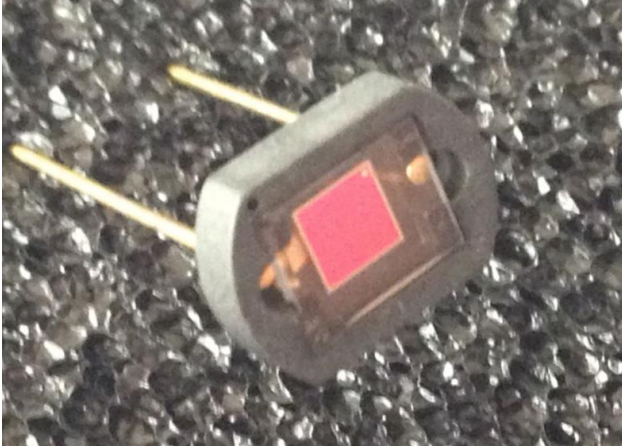


## SUNLIGHT SENSITIVE photo diode

### OSD9-SC



### Description

The OSD9-SC is sunlight sensitive high-output, high-speed silicon photo diode which is mounted in 2PIN ceramic package, permits wide angular response.

### Applications

\*sunlight sensor \* light control temperature

### Absolute Maximum Ratings (Ta=23°C)

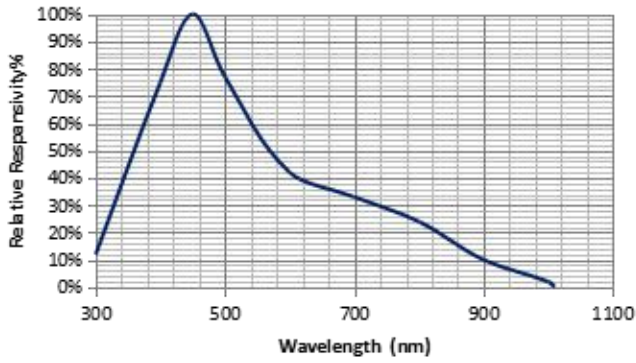


Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Chip size	size	-		2.54*2.54		mm <sup>2</sup>
Active area	A	-		2.25*2.25		mm <sup>2</sup>
Dark current	I <sub>D</sub>	V <sub>R</sub> =10mV		10		pA
		V <sub>R</sub> =10V		50		
Rise time	t <sub>R</sub>	V <sub>R</sub> =0V; λ =535nm;R <sub>L</sub> =50Ω		300		ns
Tempcoeffi-cient of I <sub>D</sub>	T <sub>CI D</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>	5			V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V f=1MHz E <sub>e</sub> =0mW/cm <sup>2</sup>		190		pF
		V <sub>R</sub> =5V f=1MHz E <sub>e</sub> =0mW/cm <sup>2</sup>		120		
Photo sensitivity	S <sub>R</sub>	450nm		0.25		A/W
Spectral Application Range	λ range		300		900	nm
Spectral Response-Peak	λ <sub>p</sub>			450		nm
Shunt resistance	R <sub>sh</sub>	V <sub>R</sub> =10mV		0.1		GΩ
Angular Resp 50% Resp Pt	θ <sup>1/2</sup>			±20		Degrees

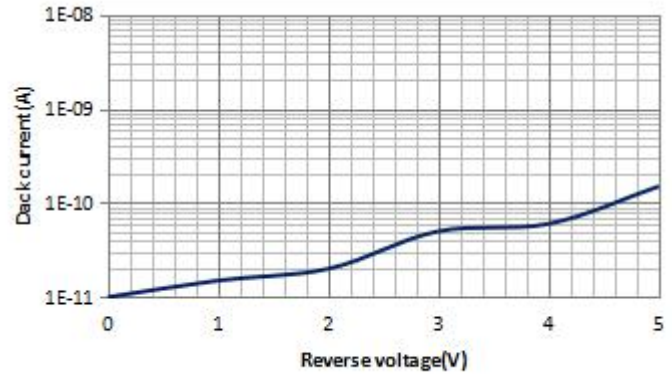


# OSD9-SC

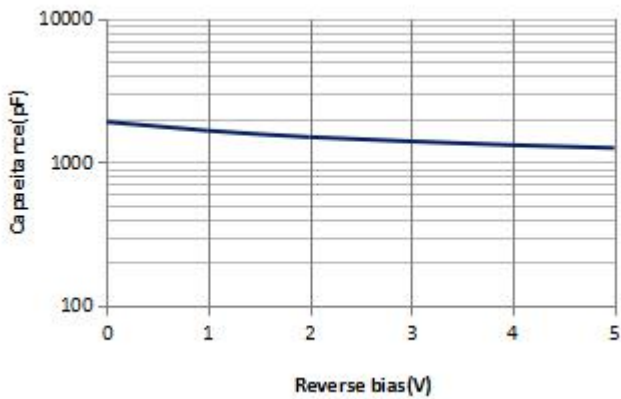
### SPECTRAL RESPONSE (Ta=23°C)



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



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



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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