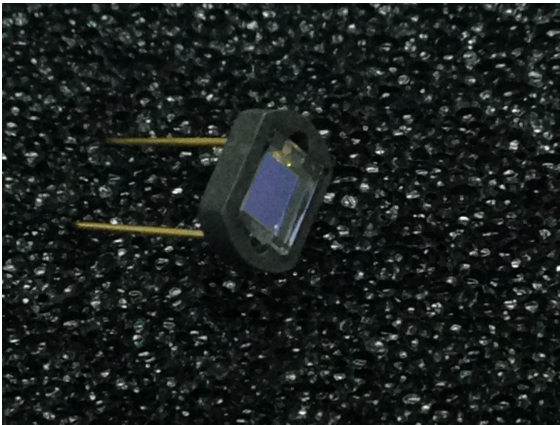


Selective wavelength photodiode

OSD9-BC

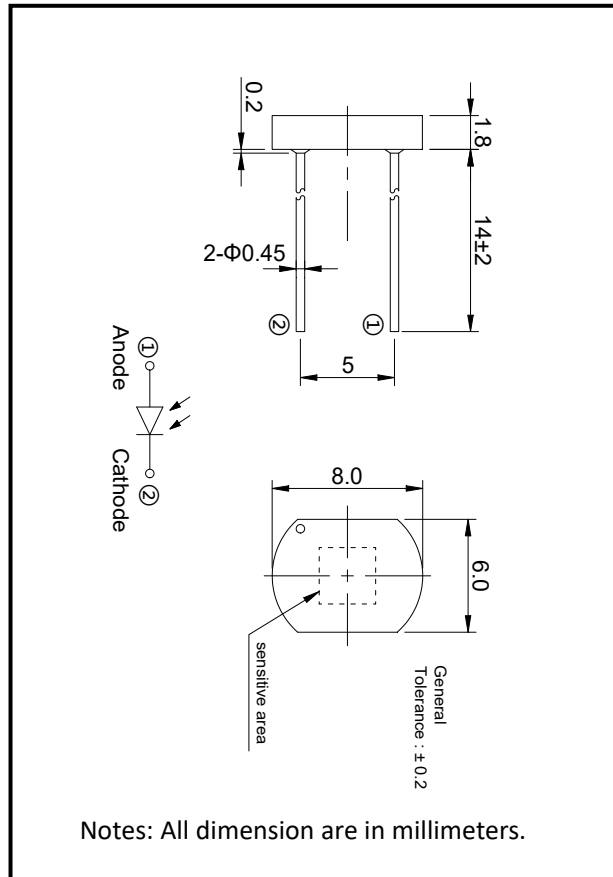


Description

The OSD9-BC is Blue light response high-output, high-speed silicon photo diode which is mounted in 2PIN ceramic package, permits wide angular response.

Applications

*Color sensor *Laser detect * Medical equipment

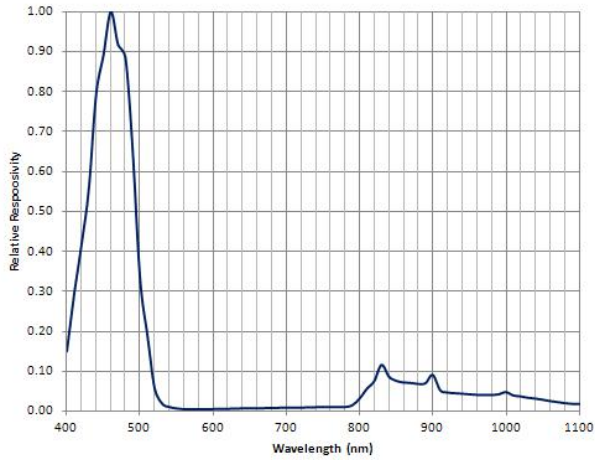


Absolute Maximum Ratings (Ta=23°C)

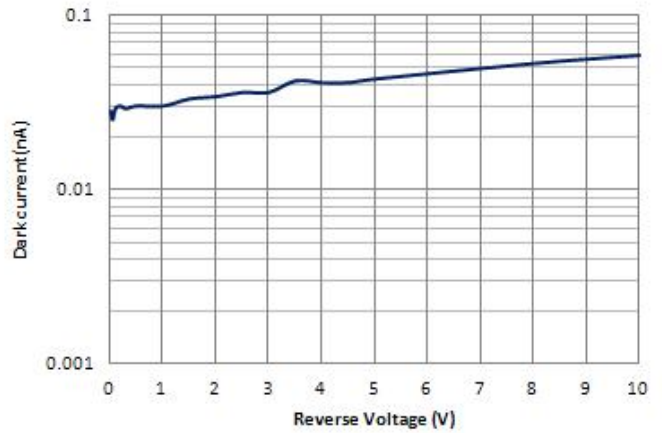


| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|------------------------------------|--------------------|---|------|-----------|------|-----------------|
| Chip size | size | - | | 3.17*3.17 | | mm ² |
| Active area | A | - | | 2.84*2.84 | | mm ² |
| Dark current | I _D | V _R =10mV | | 28 | | pA |
| | | V _R =10V | | 59 | | |
| Rise time | t _R | V _R =0V; λ =470nm;R _L =50Ω | | 300 | | ns |
| Tempcoeffi-cient of I _D | T _{CID} | | | 0.18 | | times/°C |
| Reverse breakdown voltage | V _{(BR)R} | I _R =100uA E _v =0mw/cm ² | 33 | | | V |
| Junction Capacitance | C _J | V _R =0V f=1MHz E _e =0mW/cm ² | | 75 | | pF |
| | | V _R =5V f=1MHz E _e =0mW/cm ² | | 22 | | |
| Photo sensitivity | S _R | 530nm | | 0.22 | | A/W |
| Spectral Application Range | λ range | | 360 | | 540 | nm |
| Spectral Response-Peak | λ _p | | | 460 | | nm |
| Shunt resistance | R _{sh} | V _R =10mV | | 0.35 | | GΩ |
| Angular Resp 50% Resp Pt | θ ^{1/2} | | | ±20 | | Degrees |

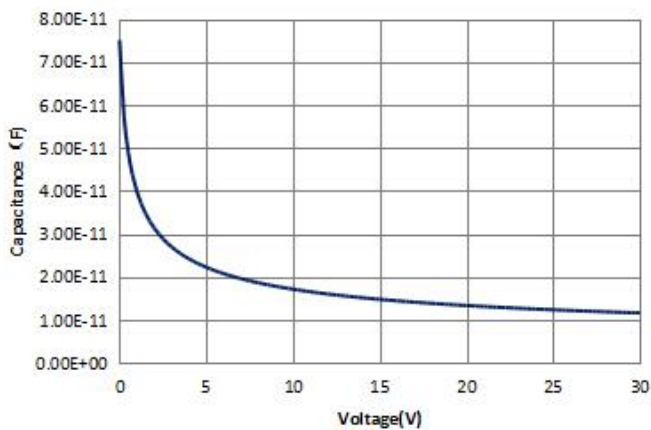
SPECTRAL RESPONSE (Ta=23°C)



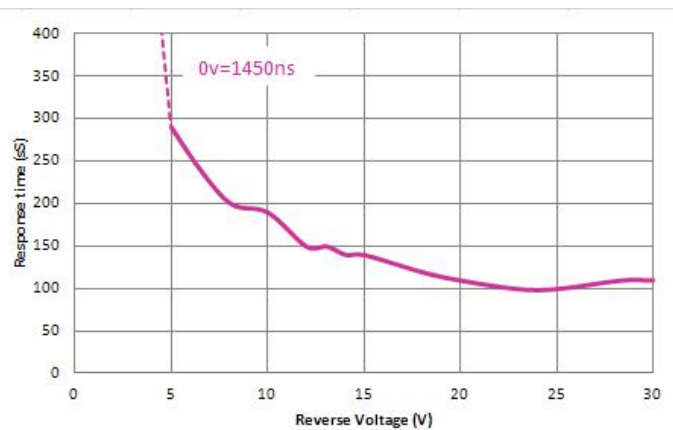
DARK CURRENT VS. REVERSE VOLTAGE (Ta=23°C)



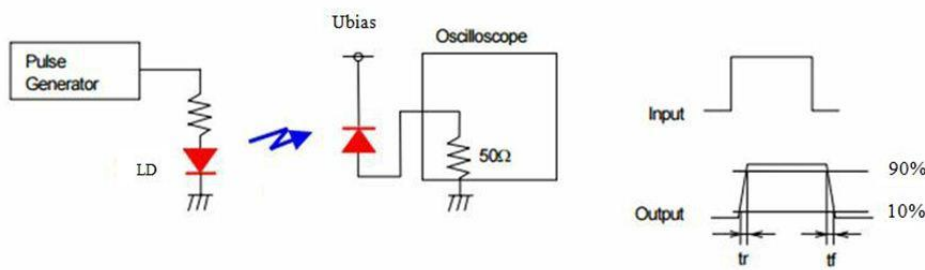
CAPACITANCE VS. REVERSE VOLTAGE (Ta=23°C)



RISE TIME *VS. REVERSE VOLTAGE (Ta=23°C)



*Measure Circuit:



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.