

## Si Photodiode

## ■ Feather

- BPW1010CE For visible to near IR range;
- Blue sensitivity enhanced type
- Chip size small;
- High sensitivity;
- Low dark current;
- High cost performance;

## ■ Applications

- Optical equipments
- Analytical instruments
- Measurements equipments
- Exposure meter
- Illuminometer
- Camera auto exposure
- Stroboscope light control
- Copier
- Display light control
- Optical switch

## ■ General ratings / Absolute Maximum Ratings

Type No.	Window material	Active area size (mm)
BPW1010CE	Optical glass	9.8 x 9.8

## ■ Absolute Maximum Ratings (Typ.Ta=25 °C)

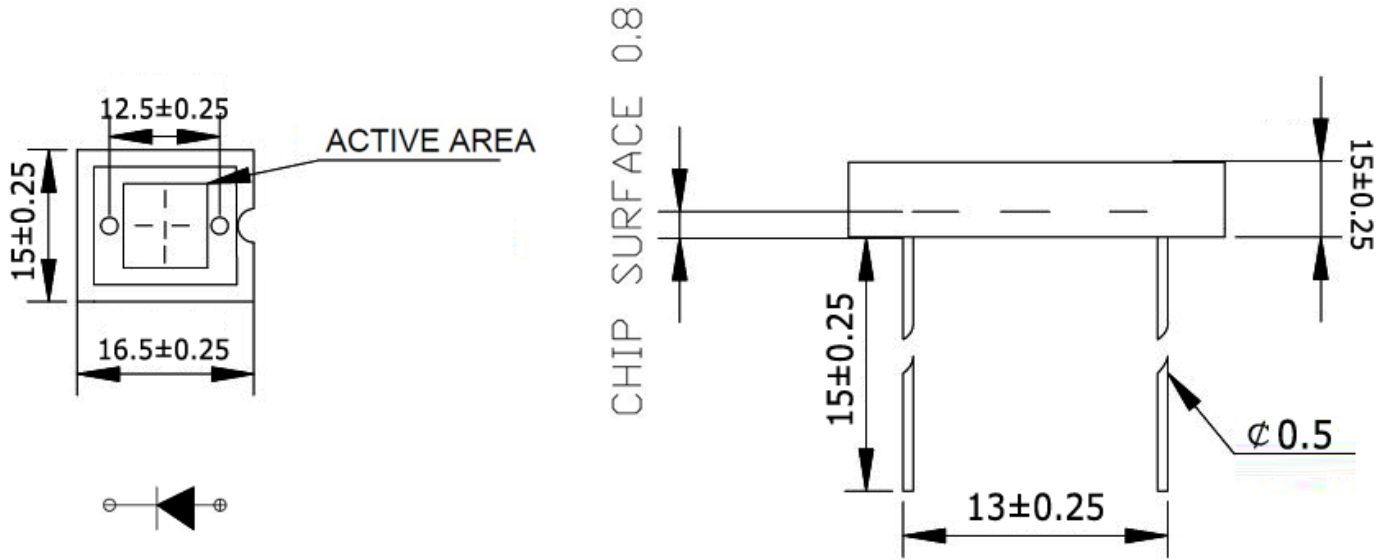
Item	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Operating temperature	T <sub>opr.</sub>	-20~+80	°C
Storage temperature	T <sub>stg.</sub>	-30~+120	°C
Soldering Temp.	T <sub>sol.</sub>	260	°C

For Max 5 seconds at the position of 2mm from the package

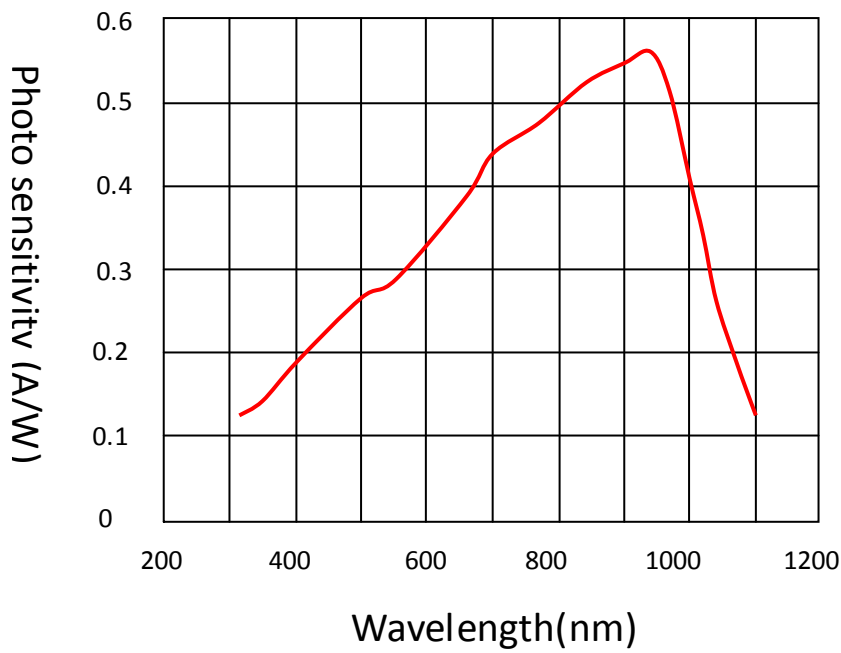
## ■ Electro-optical Characteristics(Typ.Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit,
Open circuit voltage	V <sub>oc</sub>	E <sub>v</sub> =100lux		0.3		V
Short circuit current	I <sub>sc</sub>	2856K		55		uA
Dark Current	I <sub>d</sub>	V <sub>R</sub> = -1V		20		nA
Terminal Capacitance	C <sub>t</sub>	V=0V,f=10KHz		20		pF
Spectral Sensitivity	λ		300		1100	nm
Peak Wavelength	λ <sub>p</sub>			940		

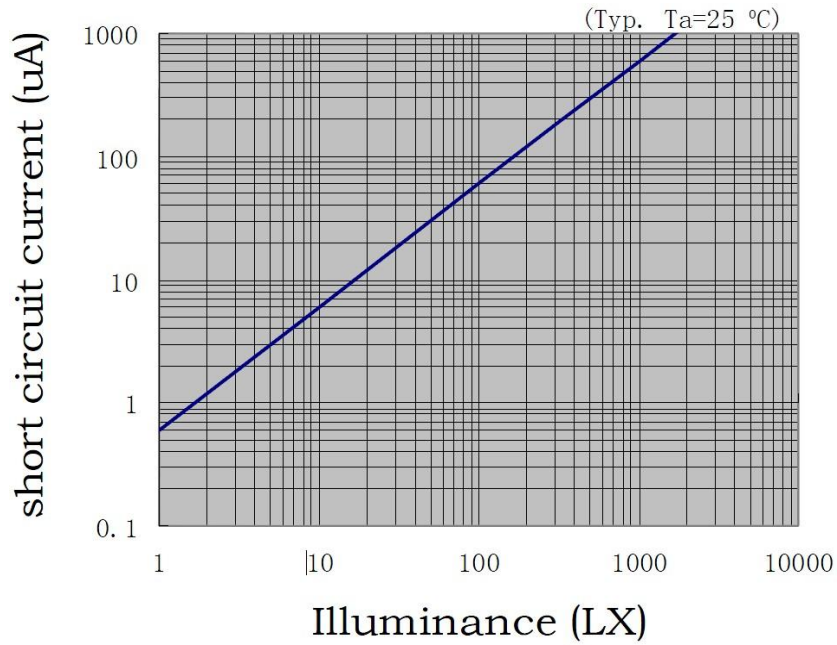
■ Dimensional outline(unit:mm)



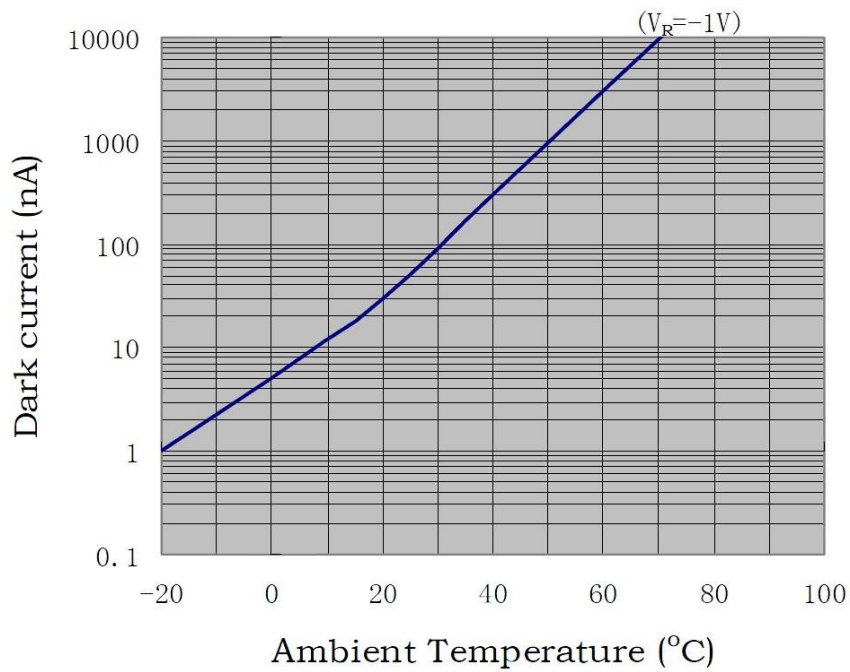
■ Spectral response (TYP. Ta=25°C)



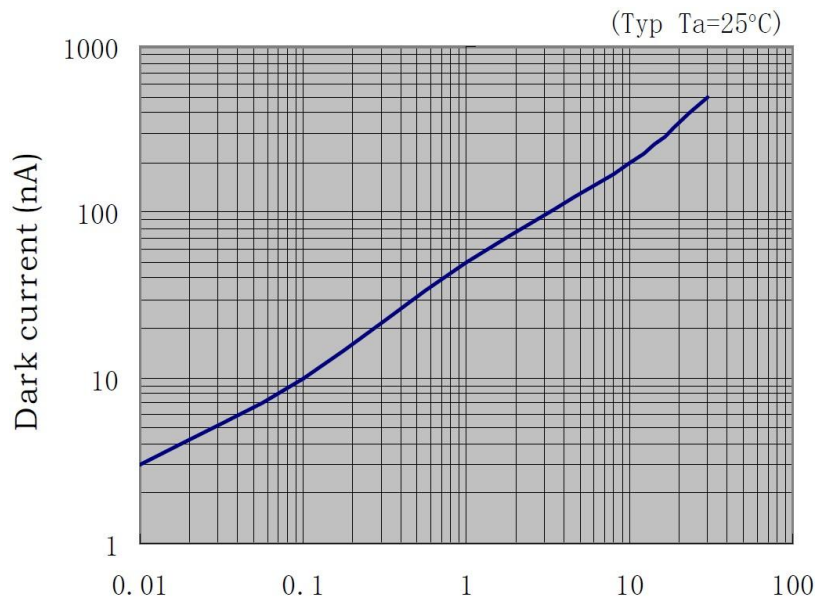
■ Short circuit current Vs.Illuminance



■ Dark Current Vs. Ambient Temperature



### ■ Dark Current Vs. Reverse Voltage



### ■ Notice:

- We reserve the right to update products without prior notice.
- Products must ensure  $-30^\circ\text{C}$  and  $+70^\circ\text{C}$  storage temperature. Storage time not more than 3 months.  
If you need long-term storage, must be in a vacuum environment. Colleagues, storage time should not exceed one year.
- The absolute prohibition of contact with the chip surface and the lead angle.
- Operation is requested to wear gloves and a dust mask dust
- To prevent static electricity damage.
- Do not damage the chip surface, otherwise it will affect the accuracy of the product.