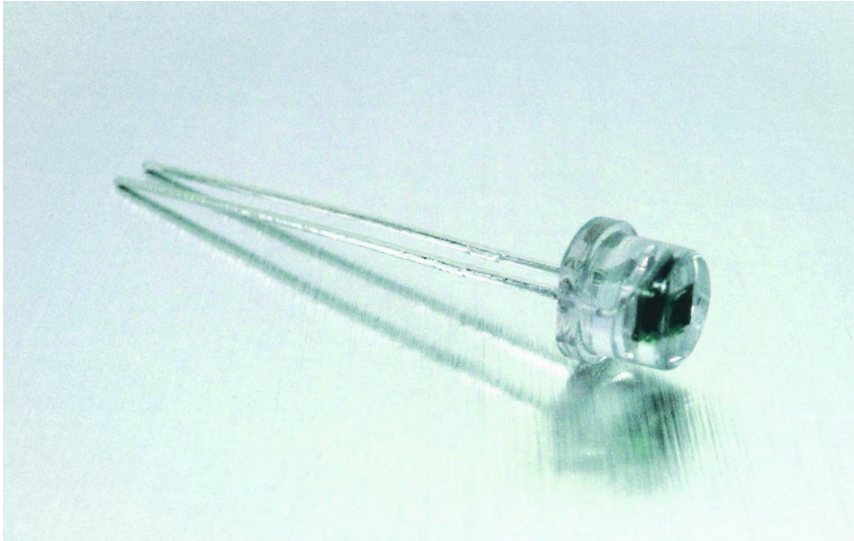


# VTP1220FBH

## IR Blocking Silicon Photodiode



### Description

This VTP processed P on N planar silicon photodiode is housed in a clear, T-1 ¼ flat end-looking package.

These diodes contain an integral IR rejection filter, offering good visual response.

The spectral response is similar to a photocell and to the human eye, making it ideal for applications where the response should only be influenced by visible light.

### Features

- ▶ Visible light response with an IR blocking filter
- ▶ Cadmium free alternative to photocells
- ▶ Low dark current
- ▶ Low junction capacitance

### Applications

- ▶ Street light switching
- ▶ Contrast control
- ▶ Colorimeters
- ▶ Camera exposure control

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**VTP120FBH IR Blocking Silicon Photodiode**

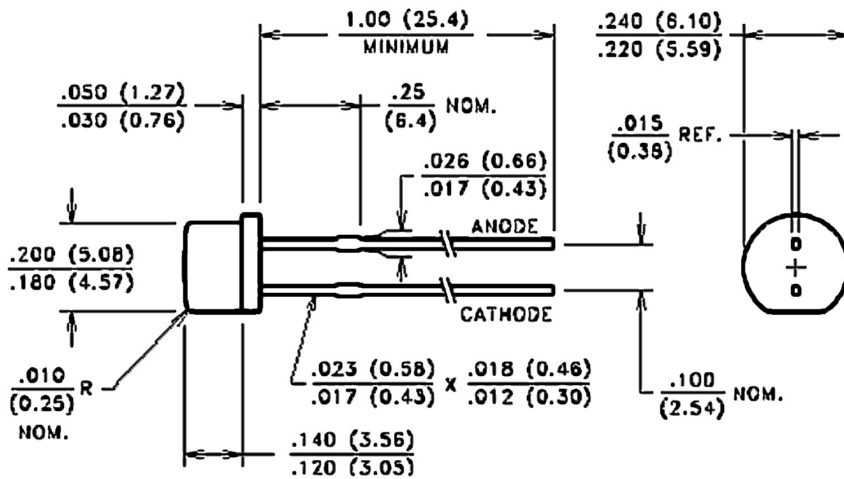
**Table 1: Electro-Optical Characteristics @ 25°C**

Parameter	Sym	Min.	Typ.	Max.	Units
Short Circuit current @ 100fc, 2850K	I <sub>sc</sub>	0.7	-	-	μA
Dark Current @ V <sub>R</sub> = 10V	I <sub>D</sub>	-	-	10	nA
Junction Capacitance @ V <sub>R</sub> = 0V, 1MHz	C <sub>J</sub>	-	-	18	pF
Open Circuit Voltage @ 100fc	V <sub>OC</sub>	-	280	-	mV
Peak Spectral Response	λ <sub>PK</sub>	-	550	-	nm
Sensitivity @ peak	S <sub>R</sub>	-	0.27	-	A/W
Angular Response (50% Point)	θ <sub>1/2</sub>	-	± 70	-	Degrees

**Table 2: Absolute Maximum Ratings**

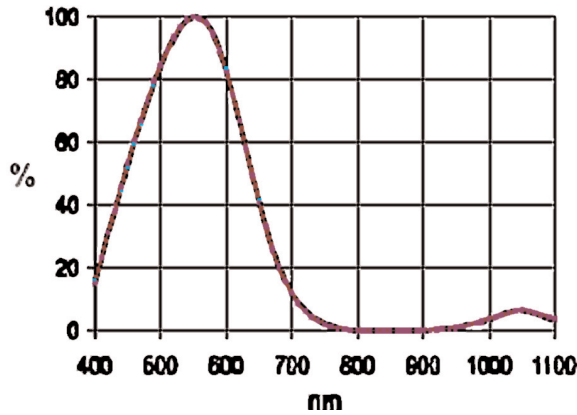
Parameter	Sym	Min.	Typ.	Max.	Units
Storage Temperature	T <sub>ST</sub>	-40	-	85	°C
Operating Temperature	T <sub>OP</sub>	-40	-	85	°C

**Figure 1: Mechanical Characteristics**



**CASE 26F T-1 3/4 FLAT**  
 CHIP SIZE: .061 x .077 (1.55 x 1.96)  
 TOTAL EXPOSED ACTIVE AREA: .0019 in<sup>2</sup> (1.219 mm<sup>2</sup>)

**Figure 2: Relative Spectral Response**



## Ordering Information

While the information in this data sheet is intended to describe the form, fit and function for this product, Excelitas reserves the right to make changes without notice.

For more information e-mail us at [generalinquiries@excelitas.com](mailto:generalinquiries@excelitas.com) or visit our web site at [www.excelitas.com](http://www.excelitas.com). All values are nominal; specifications subject to change without notice.

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