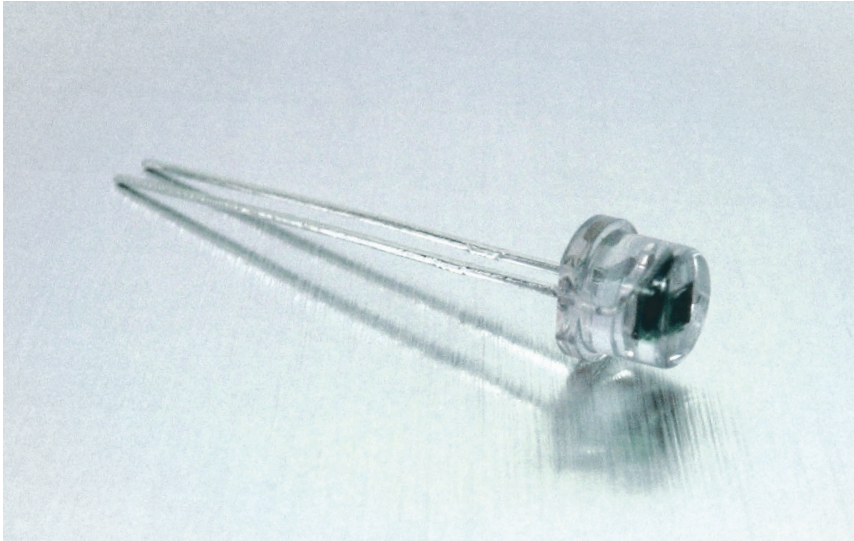


VTP1220FB

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

VTP1220FB IR Blocking Silicon Photodiode

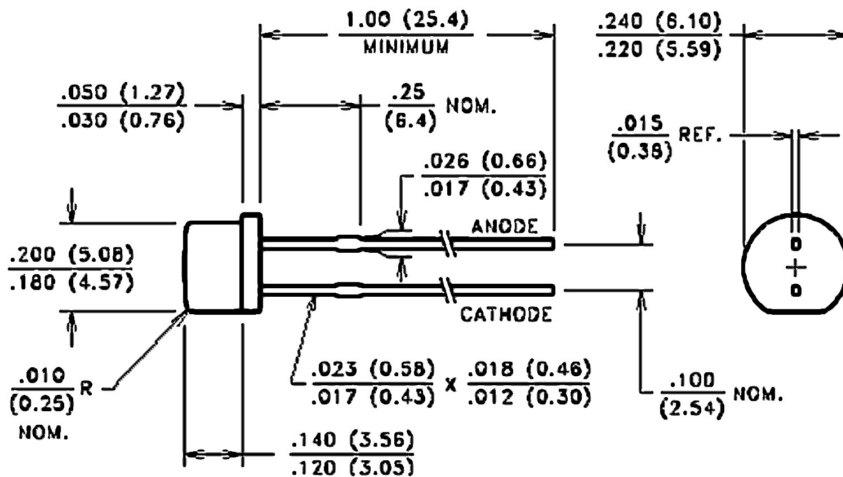
Table 1: Electro-Optical Characteristics @ 25°C

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

Table 2: Absolute Maximum Ratings

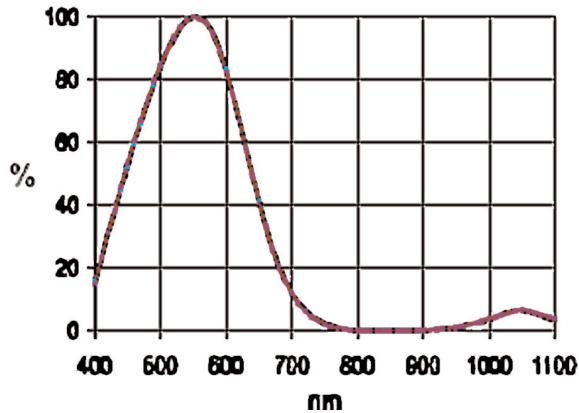
Parameter	Sym	Min.	Typ.	Max.	Units
Storage Temperature	T _{ST}	-40	-	85	°C
Operating Temperature	T _{OP}	-40	-	85	°C

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 in² (1.219 mm²)

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, PerkinElmer reserves the right to make changes without notice.

For more information e-mail us at opto@perkinelmer.com or visit our web site at www.optoelectronics.perkinelmer.com. All values are nominal; specifications subject to change without notice.

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