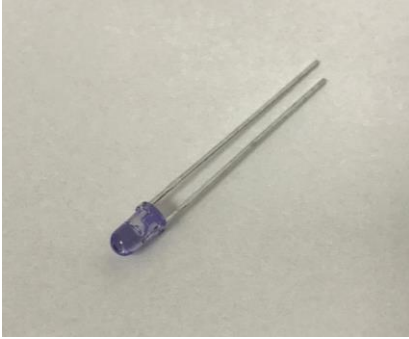


## VTE3375LA Infrared emitting diode



The VTE3375LA is an 880nm, GaAlAs infrared emitting diode (IRED) mounted in a long T-1 (3mm diameter) plastic package. The IRED's emission characteristics make it suitable for smoke detection, illumination, and optical switching applications.

The IRED is UL approved under UL file S3506, for smoke detection applications.

Excelitas also offers this IRED paired with a photodiode, mounted in a pre-calibrated module for smoke detection, which greatly reduces time-to-market of OEM.

### Key Features

- 880nm emission wavelength
- UL certified for smoke Detectors
- RoHS-compliant

### Applications

- Smoke detection
- Optical switches
- Illumination

**Table 1: Electro-optical characteristics and specifications (Test conditions: 25°C)**

Parameters	Minimum	Typical	Maximum	Units	Test Conditions
Storage Temperature	-40		100	°C	
Operating Temperature	-40		100	°C	
Peak Emission Wavelength		880		nm	
Forward Voltage Drop			1.8	V	$I_F = 20 \text{ mA}$
Forward Leakage Current			10	$\mu\text{A}$	At 0.6V Forward Voltage
Reverse Leakage Current			10	$\mu\text{A}$	At 5V Reverse Voltage
Irradiance	2.0	6.0		$\text{mW}/\text{cm}^2$	With $I_F = 20 \text{ mA}$ ; Distance = 10.16 mm; Aperture diameter = 2.1 mm
Peak Forward Operating Current (pulsed)			1.0	A	250 $\mu\text{s}$ pulses at 10Hz
Continuous Operating Current			50	mA	
Half Power Beam Angle		$\pm 12.5$		°	At FWHM
Lead Soldering Temperature			260	°C	1.6mm from case, maximum 5 seconds

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VTE3375LA

## Infrared Emitting Diode

### Typical Characteristic Curves

Figure 1: Emission Spectra

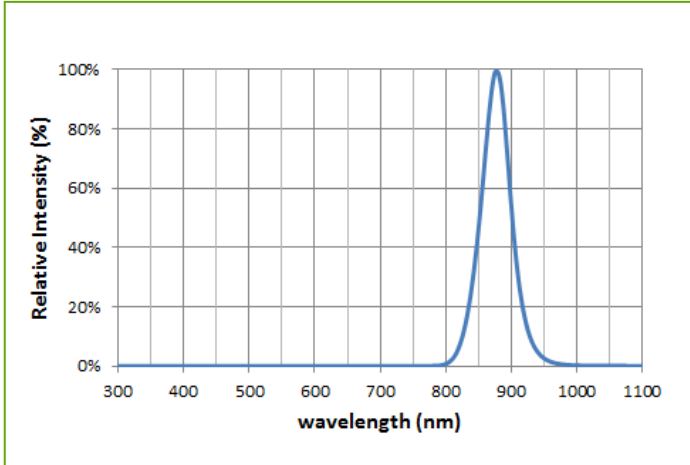


Figure 2: I-V Curve

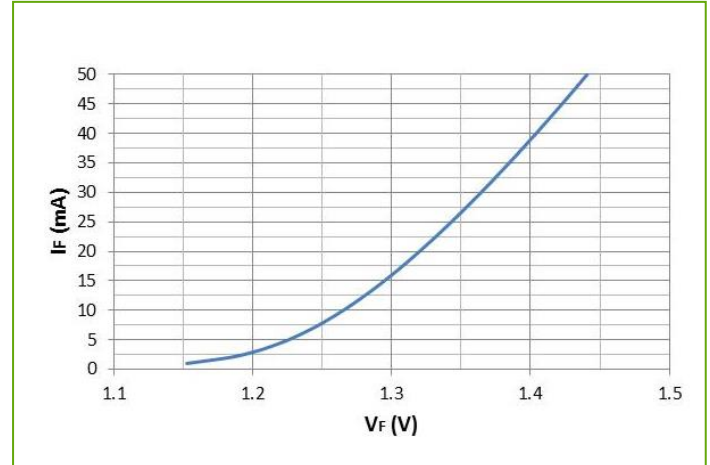
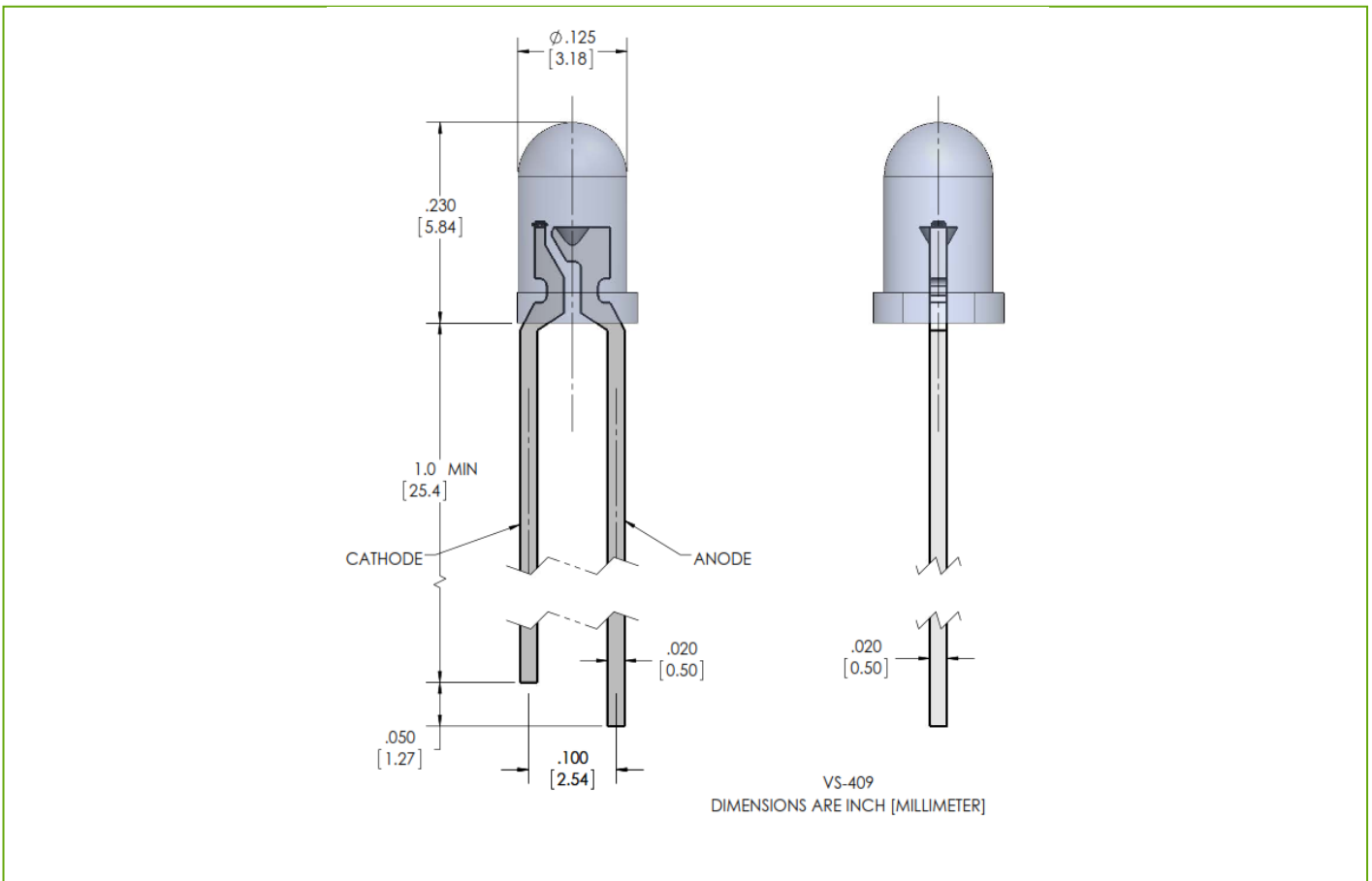


Figure 3: Mechanical Dimensions



**VTE3375LA**

## **Infrared Emitting Diode**

### **Packaging**

The parts will be shipped in bulk with proper labelling for traceability. Specific packaging type like Tape and Reel can be catered but with added cost.

### **RoHS compliance**

The herein described device is designed and built to be fully compliant with the European Union Directive ROHS 2 2011/6/EU – Restriction of the use of certain Hazardous Substances (RoHS) in Electrical and Electronic equipment.



### **Country of origin**

The VTE3375LA is made in the Philippines.

### **Disclaimer:**

*All Product Specifications and Data are subject to change without prior notice to improve the product reliability and performance.*

*The party using this component should have an independent testing to gauge the component's performance and reliability for their specific application. Excelitas Technologies reserves the right for the modification and continuation of this product. Any suggested modifications can be addressed but may result to a specific part number specific for the requesting party. You may contact Excelitas Sales for any suggested modifications.*

VTE3375LA

## Infrared Emitting Diode

### About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high- performance technology needs of OEM customers.

Excelitas has a long and rich history of serving our OEM customer base with optoelectronic sensors and modules for more than 45 years beginning with PerkinElmer, EG&G, and RCA. The constant throughout has been our innovation and commitment to delivering the highest quality solutions to our customers worldwide.

From analytical instrumentation to clinical diagnostics, medical, industrial, safety and security, and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their specialty end-markets. Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

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nordics@amstechnologies.com  
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