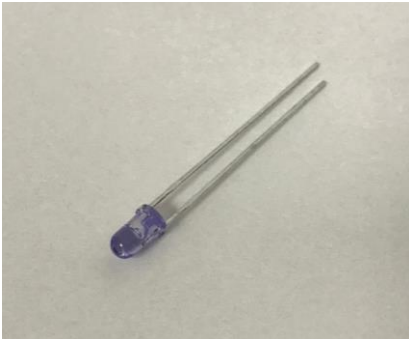


## VTE3375LA

### 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 <sub>F</sub> = 20 mA
Forward Leakage Current			10	μA	At 0.6V Forward Voltage
Reverse Leakage Current			10	μA	At 5V Reverse Voltage
Irradiance	2.0	6.0		mW/cm <sup>2</sup>	With I <sub>F</sub> = 20 mA; Distance = 10.16 mm; Aperture diameter = 2.1 mm
Peak Forward Operating Current (pulsed)			1.0	A	250μs pulses at 10Hz
Continuous Operating Current			50	mA	
Half Power Beam Angle		±12.5		°	At FWHM
Lead Soldering Temperature			260	°C	1.6mm from case, maximum 5 seconds

VTE3375LA

# Infrared Emitting Diode

## Typical Characteristic Curves

Figure 1: Emission Spectra

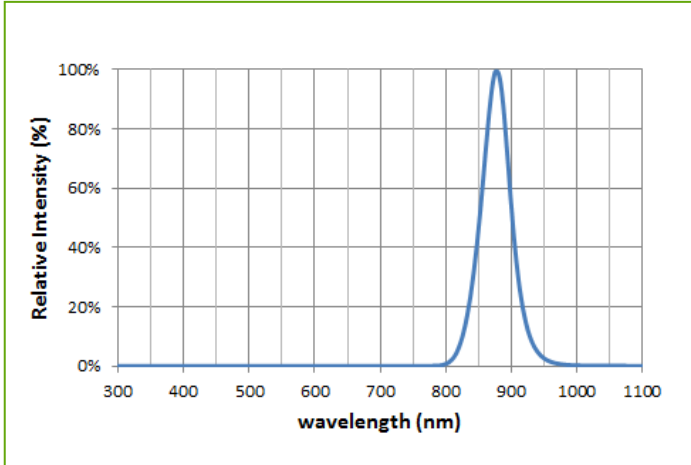


Figure 2: I-V Curve

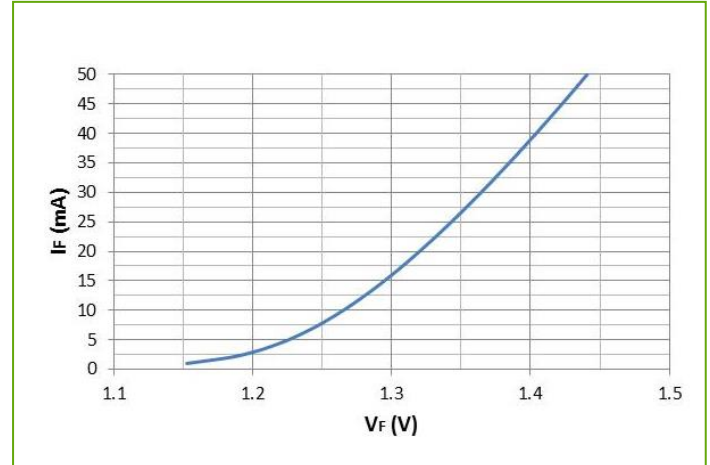
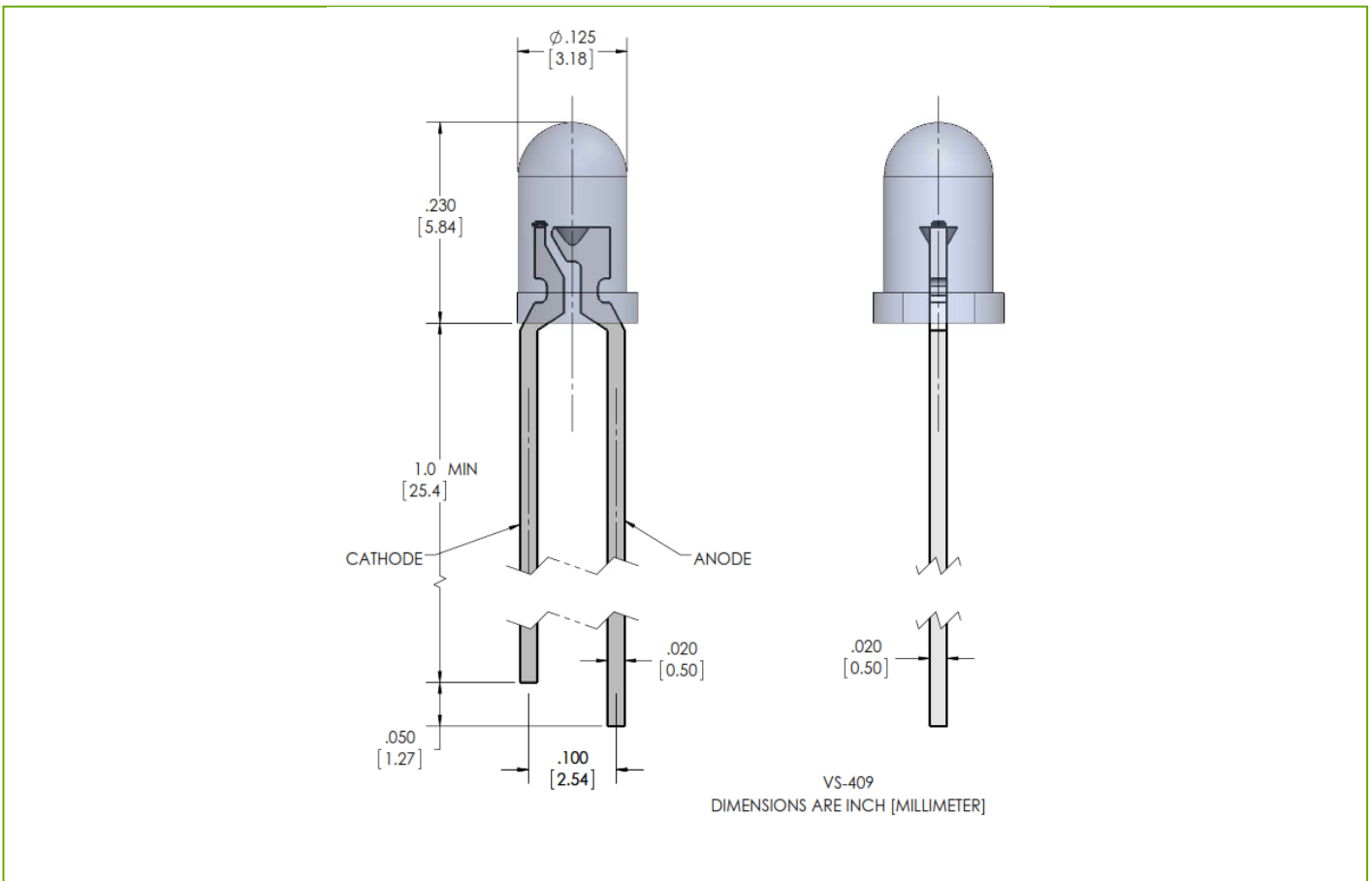


Figure 3: Mechanical Dimensions



**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.

**Excelitas Technologies**  
22001 Dumberry Road  
Vaudreuil-Dorion, Quebec  
Canada J7V 8P7  
Telephone: (+1) 450.424.3300  
Toll-free: (+1) 800.775.6786  
Fax: (+1) 450.424.3345  
detection.na@excelitas.com

**Excelitas Technologies  
GmbH & Co. KG**  
Wenzel-Jaksch-Str. 31  
D-65199 Wiesbaden  
Germany  
Telephone: (+49) 611 492 430  
Fax: (+49) 611 492 165  
detection.europe@excelitas.com

**Excelitas Technologies**  
8 Tractor Road  
Singapore 627969  
Telephone: (+65) 6775 2022 (Main Line)  
Telephone: (+65) 6770 4366 (Customer Service)  
Fax: (+65) 6778 1752  
detection.asia@excelitas.com



For a complete listing of our global offices, visit [www.excelitas.com/locations](http://www.excelitas.com/locations)

© 2016 Excelitas Technologies Corp. All rights reserved. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks not owned by Excelitas Technologies or its subsidiaries that are depicted herein are the property of their respective owners. Excelitas reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.