

VTE3310

Blue Light Emitting Diode



The VTE3310 is a 460nm, InGaN blue light emitting diode (LED) mounted in a long T-1 (3mm diameter) plastic package. The Blue LED's emission characteristics make it suitable for smoke detection and illumination applications.

VTE3310 is identical to 21E243, which is UL approved under UL file S3506, for smoke detection applications.

Excelitas can offer this Blue LED combined with a photodiode, mounted in a pre-calibrated module for smoke detection application, which greatly reduces time-to-market for OEM.

Key Features

- 460nm emission wavelength
- UL certified for smoke Detectors
- RoHS-compliant

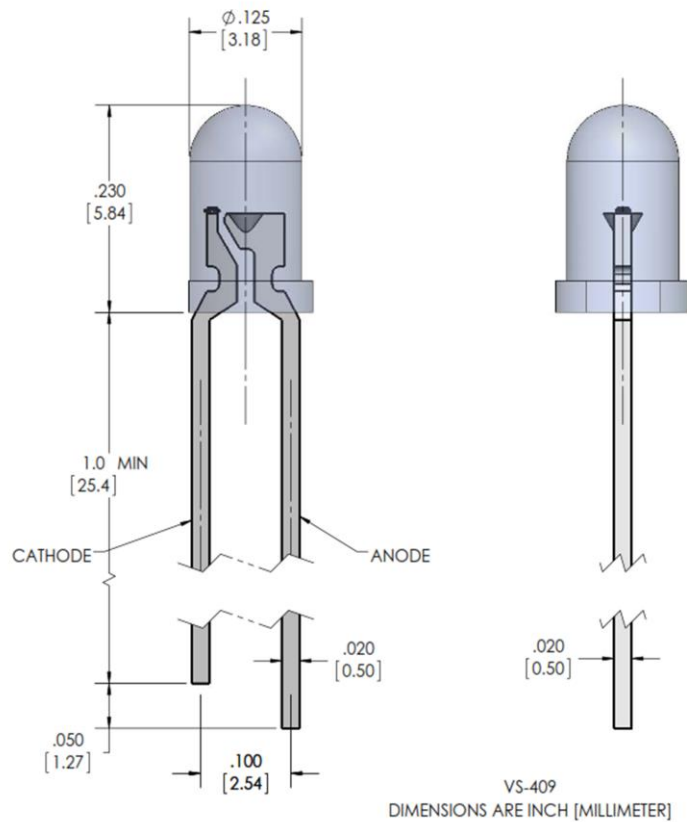
Applications

- Smoke detection
- 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		460		Nm	
Forward Voltage Drop – DC I_f	2.7		3.7	V	$I_f = 20 \text{ mA}$
Forward Leakage Current			10	μA	At 0.6V Forward Voltage
Reverse Leakage Current			10	μA	At 5V Reverse Voltage
Irradiance	0.5	3.8		mW/cm^2	With $I_f = 20 \text{ mA}$; Distance = 10.16 mm; Aperture diameter = 2.1 mm
Peak Forward Operating Current (pulsed)			100	mA	1/10 duty cycle at 1kHz
Continuous Operating Current			50	mA	
Half Power Beam Angle		± 5		°	At FWHM
Lead Soldering Temperature			260	°C	1.6mm from case, maximum 5 seconds

Figure 1: Mechanical Dimensions



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 VTE3310 is made in the Philippines.

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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.

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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