VTP3420LA

3mm Photodiode

The VTP3420LA is a Si photodiode (PD) mounted in a long T-1 (3mm diameter) plastic package. The package material is infrared transmitting and visible blocking. The PD's sensitivity characteristics make it suitable for smoke detection and infrared detection applications.

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

Key Features

- Infrared sensitivity
- Visible blocking
- RoHS-compliant

Applications

- Smoke detection
- Infrared detection

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	
Spectral Application Range	700		1150	nm	
Spectral Peak Sensitivity		925		nm	
Light Current	34	40		uA	At Vrev = 5V; 100 fc
Dark Current			35	nA	At Vrev = 10V; 0 fc
Forward Voltage Drop			1.5	V	At I_F = 10 mA; 0 fc
Breakdown Voltage	30			V	At I_{rev} = 0.1 mA; 0 fc
Junction Capacitance			150	pF	At Vrev = 15V
Angular response		±16		°	At FWHM
Lead Soldering Temperature			260	°C	1.6mm from case, maximum 5 seconds

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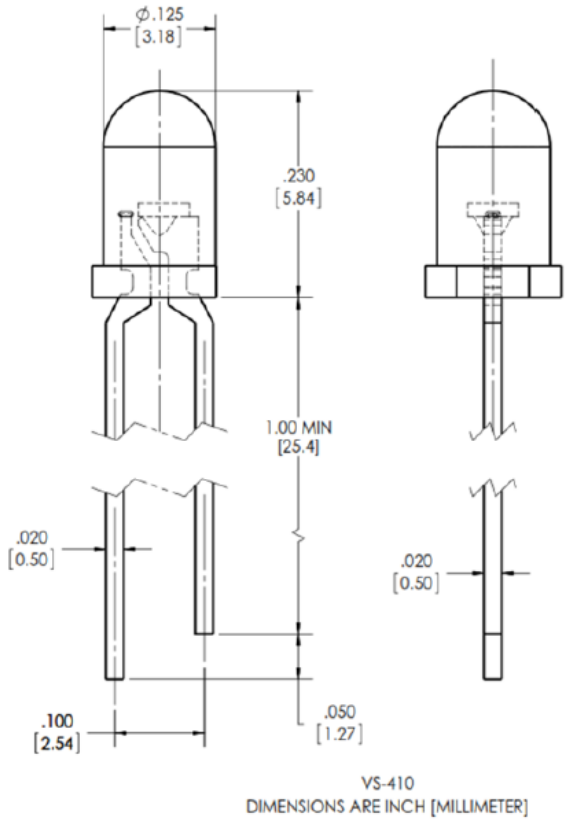
Figure 1: Mechanical Dimensions



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 VTP3420LA 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.