

Part Number: L-53P3C

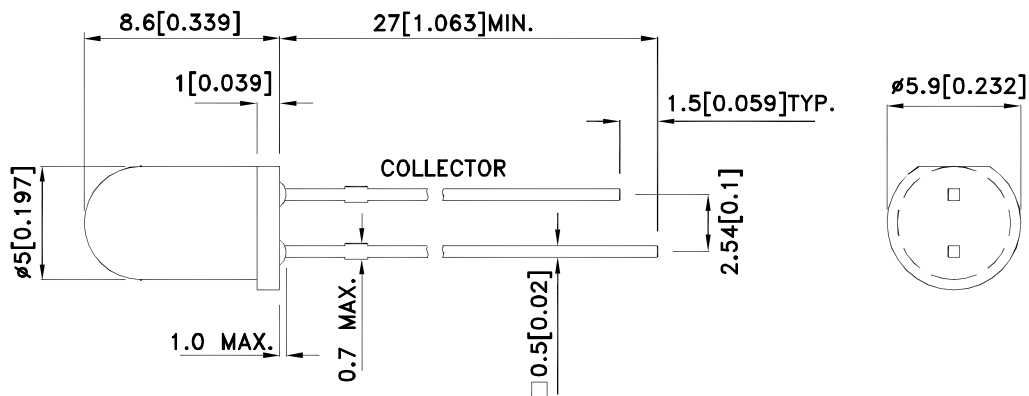
### Features

- Mechanically and spectrally matched to the infrared emitting LED lamp .
- RoHS compliant.

### Description

Made with NPN silicon phototransistor chips.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



## Electrical / Optical Characteristics at TA=25°C

| Symbol                | Parameter                               | Min. | Typ. | Max. | Units | Test Conditions   |
|-----------------------|---|------|------|------|-------|---|
| V <sub>BR CEO</sub>   | Collector-to-Emitter Breakdown Voltage  | 30   |      |      | V     | I <sub>C</sub> =100uA<br>E <sub>e</sub> =0mW/c m <sup>2</sup>           |
| V <sub>BR ECO</sub>   | Emitter-to-Collector Breakdown Voltage  | 5    |      |      | V     | I <sub>E</sub> =100uA<br>E <sub>e</sub> =0mW/c m <sup>2</sup>           |
| V <sub>CE (SAT)</sub> | Collector-to-Emitter Saturation Voltage |      |      | 0.8  | V     | I <sub>C</sub> =2mA<br>E <sub>e</sub> =20mW/c m <sup>2</sup>            |
| I <sub>CEO</sub>      | Collector Dark Current                  |      |      | 100  | nA    | V <sub>CE</sub> =10V<br>E <sub>e</sub> =0mW/c m <sup>2</sup>            |
| T <sub>R</sub>        | Rise Time (10% to 90% )                 |      | 15   |      | us    | V <sub>CE</sub> = 5V<br>I <sub>C</sub> =1mA<br>R <sub>L</sub> =1000Ω    |
| T <sub>F</sub>        | Fall Time (90% to 10% )                 |      | 15   |      | us    |   |
| I <sub>(ON)</sub>     | On State Collector Current              | 0.7  | 3    |      | mA    | V <sub>CE</sub> = 5V<br>E <sub>e</sub> =1mW/c m <sup>2</sup><br>λ=940nm |

## Absolute Maximum Ratings at TA=25°C

| Parameter   | Max.Ratings    |
|---|----------------|
| Collector-to-Emitter Voltage                              | 30V            |
| Emitter-to-Collector Voltage                              | 5V             |
| Power Dissipation at (or below) 25°C Free Air Temperature | 100mW          |
| Operating Temperature                                     | -40°C To +85°C |
| Storage Temperature                                       | -40°C To +85°C |
| Lead Soldering Temperature (>5mm for 5sec)                | 260°C          |