

Part Number: KM-4457P3BT-R

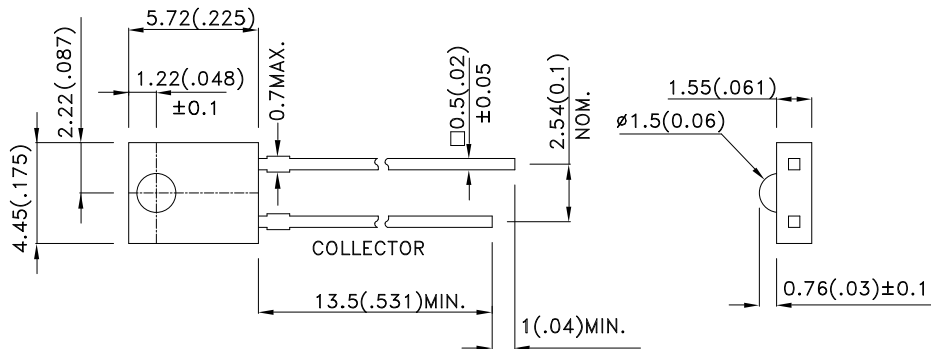
### Features

- Mechanically and spectrally matched to infrared emitting LED lamp.
- Blue transparent lens.
- 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. Specifications are subject to change without notice.



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

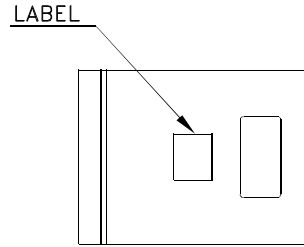
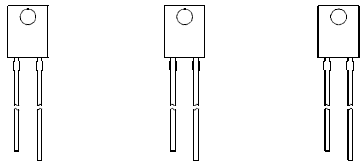
| Symbol                | Parameter                               | Min. | Typ. | Max. | Units | Test Conditions   |
|-----------------------|---|------|------|------|-------|---|
| V <sub>BR CEO</sub>   | Collector-to-Emitter Breakdown Voltage  | 30   |      |      | V     | I <sub>C</sub> =100uA<br>E <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              | 0.1  | 0.3  |      | 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          |

**PACKING & LABEL SPECIFICATIONS**

**KM-4457P3BT-R**

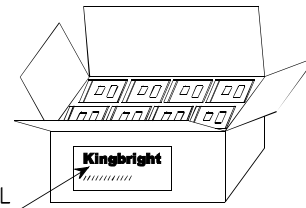


500PCS/BAG



30K/9# BOX

OUTSIDE LABEL



OUTSIDE LABEL

15K/5# BOX

|  |  |
|--|--|
| <h2 style="margin: 0;">Kingbright</h2> |  |
| P/NO: KM-4457xxx                       |  |
| QTY: 500 pcs                           | Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C<br/>xx xx xxxx<br/>PASSED</span> |
| S/N: XXXX                              |  |
| CODE: XXX                              |  |
| LOT NO:                                |  |
|  |  |
| xxxxxxxxxxxxxxxxxxxxxxxx               |  |
| RoHS Compliant                         |  |