

W32P3C

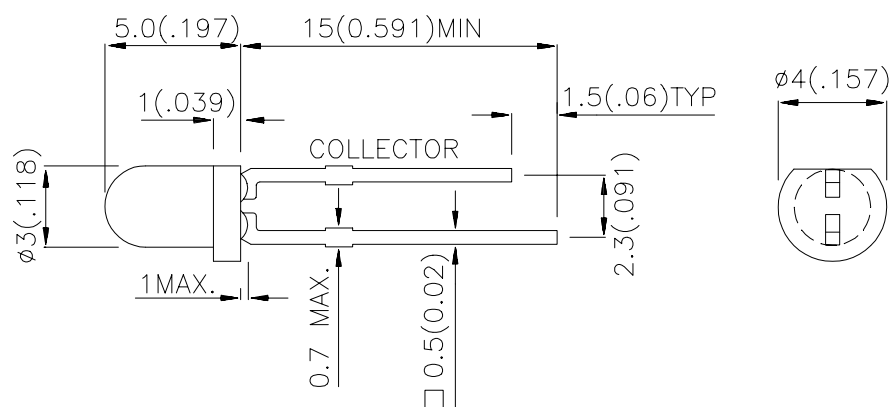
### Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE W34 SERIES INFRARED EMITTING LED LAMP.
- WATER CLEAR LENS.

### Description

P3 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 lead emerge package.
4. Specifications are subject to change without notice.

## Electrical / Optical Characteristics at $T_A=25^{\circ}\text{C}$

| Symbol          | Parameter                               | Min. | Typ. | Max. | Unit | Test Condition                                                                   |
|-----------------|-----------------------------------------|------|------|------|------|----------------------------------------------------------------------------------|
| $V_{BR\ CE O}$  | Collector-to-Emitter Breakdown Voltage  | 30   | -    | -    | V    | $I_C=100\mu\text{A}$ ,<br>$E_e=0\text{mW}/\text{cm}^2$                           |
| $V_{BR\ ECO}$   | Emitter-to-Collector Breakdown Voltage  | 5    | -    | -    | V    | $I_E=100\mu\text{A}$ ,<br>$E_e=0\text{mW}/\text{cm}^2$                           |
| $V_{CE\ (SAT)}$ | Collector-to-Emitter Saturation Voltage | -    | -    | 0.8  | V    | $I_C=2\text{mA}$ ,<br>$E_e=20\text{mW}/\text{cm}^2$                              |
| $I_{CEO}$       | Collector Dark Current                  | -    | -    | 100  | nA   | $V_{CE}=10\text{V}$ ,<br>$E_e=0\text{mW}/\text{cm}^2$                            |
| $T_R$           | Rise Time (10% to 90%)                  | -    | 3    | -    | us   | $V_{CE}=5\text{V}$ ,<br>$I_C=1\text{mA}$ ,<br>$R_L=1000\Omega$                   |
| $T_F$           | Fall Time (90% to 10%)                  | -    | 3    | -    | us   |                                                                                  |
| $I_{(ON)}$      | On State Collector Current              | 0.1  | 0.5  | -    | mA   | $V_{CE}=5\text{V}$ ,<br>$E_e=1\text{mW}/\text{cm}^2$ ,<br>$\lambda=940\text{nm}$ |

## Absolute Maximum Ratings at $T_A=25^{\circ}\text{C}$

| Parameter                                                                 | Maximum Rating                                 |
|---------------------------------------------------------------------------|------------------------------------------------|
| Collector-to-Emitter Breakdown Voltage                                    | 30V                                            |
| Emitter-to-Collector Breakdown Voltage                                    | 5V                                             |
| Power Dissipation at (or below) $25^{\circ}\text{C}$ Free Air Temperature | 100mW                                          |
| Operating Temperature Range                                               | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| Storage Temperature Range                                                 | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| Lead soldering Temperature<br>( $>5\text{mm}$ for 5sec)                   | $260^{\circ}\text{C}$                          |