

## Peak Emission Wavelength: 870nm

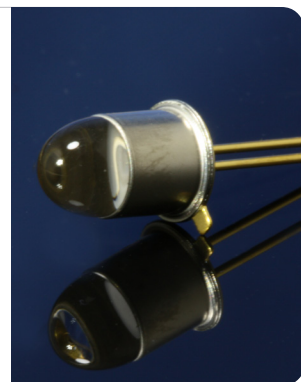
The 870nm high power infrared LED Series is designed for application requiring high accuracy and precision as well as uniform spectral emission. Custom package solutions and sorting are available.

### FEATURES

- > Hermetically Sealed TO-18
- > High Output Power
- > Gold Plated Dome Lens
- > Narrow Beam Angle / High Reliability

### APPLICATIONS

- > Optical Scanning
- > Linear & Rotary Encoder
- > Edge Sensing / Optical Sensors
- > Optical Switches / Security Systems



## Absolute Maximum Ratings (Ta=25°C)

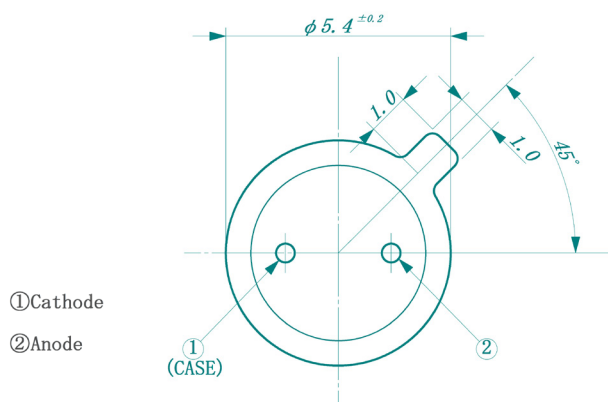
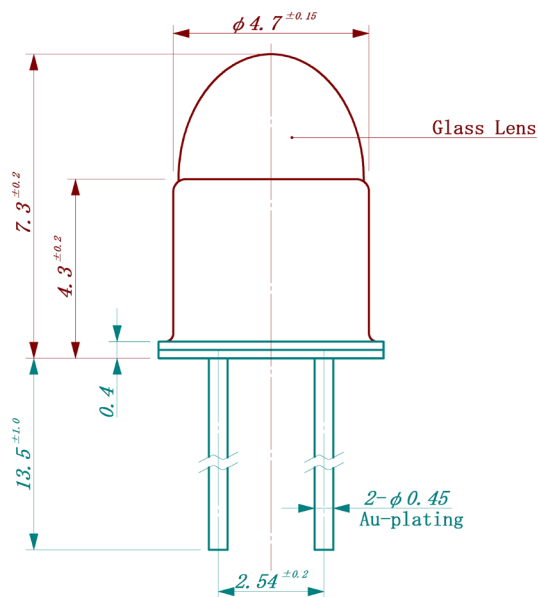


| ITEMS                       | SYMBOL | RATINGS    | UNIT |
|-----------------------------|--------|------------|------|
| Forward Current (DC)        | IF     | 100        | mA   |
| Forward Current (Pulse)*1   | IFP    | 1          | A    |
| Reverse Voltage             | VR     | 5          | V    |
| Power Dissipation           | PD     | 200        | mW   |
| Operating Temperature Range | Topr   | -20 ~ +85  | °C   |
| Storage Temperature Range   | Tstg   | -30 ~ +100 | °C   |
| Junction Temperature        | Tj     | 260        | °C   |

\*1: Tw=10μsec, T=10msec.

## Electrical & Optical Characteristics (Ta = 25°C)

| ITEMS                     | SYMBOL | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------------|--------|------------|-----|-----|-----|------|
| Power Output              | PO     | IF=50mA    | --  | 8.0 | --  | mW   |
| Forward Voltage           | VF     | IF=50mA    | --  | 1.5 | 2.0 | V    |
| Reverse Current           | IR     | VR=5V      | --  | --  | 10  | μA   |
| Peak Emission Wavelength  | λp     | IF=50mA    | --  | 870 | --  | nm   |
| Spectral Line Half Width  | Δλ     | IF=50mA    | --  | 45  | --  | nm   |
| Half Intensity Beam Angle | Θ      | IF=50mA    | --  | ±3  | --  | deg  |



Unit: mm, Tolerance:  $\pm 0.2$

The information contained herein is subject to change without notice.

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