

## Peak Sensitivity Wavelength: 660nm

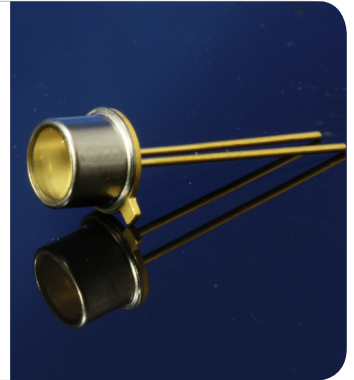
The 660nm visible emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

### FEATURES

- > TO-18 Metal Can Package
- > High Output Power
- > High Reliability

### APPLICATIONS

- > Color Sensor / Money Bill
- > Paper Sensor / Money Bill
- > Bar-code Reader
- > Fiber Applications



## Absolute Maximum Ratings (Ta=25°C)

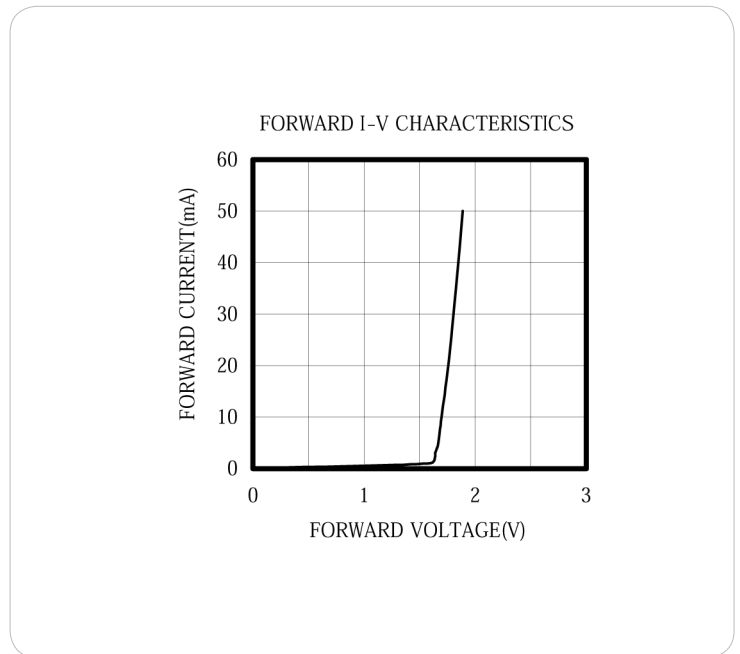
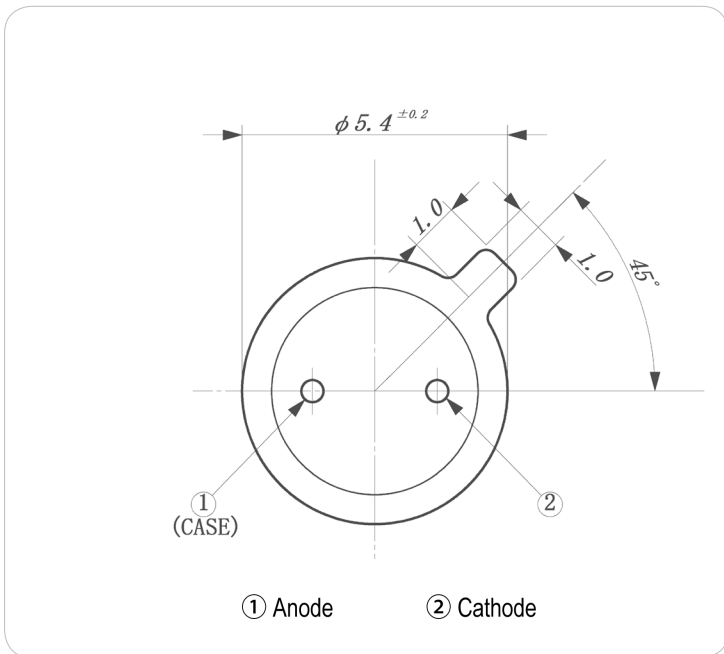
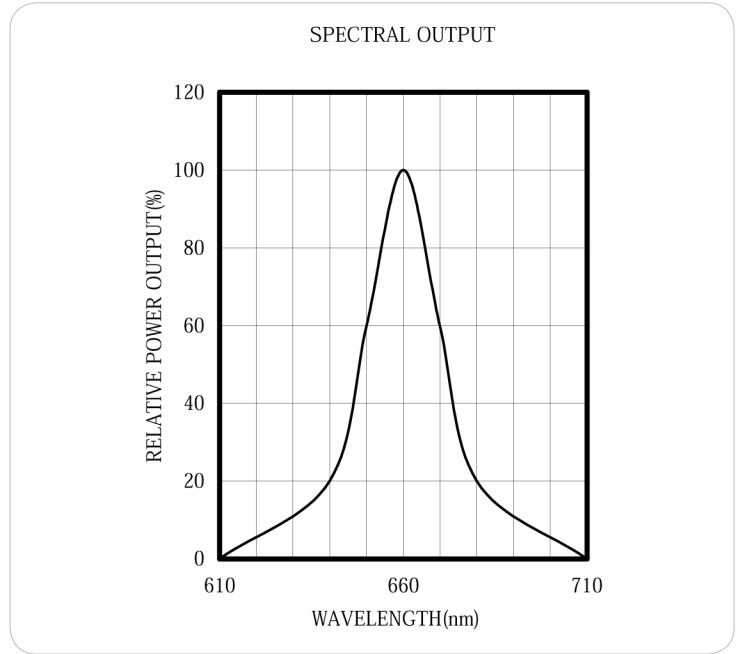
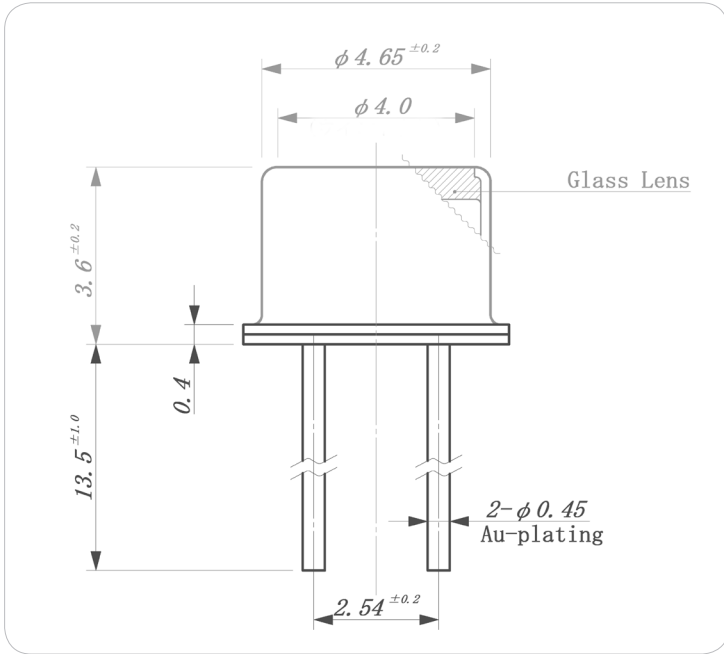


| ITEMS                        | SYMBOL | RATINGS    | UNIT |
|------------------------------|--------|------------|------|
| Forward Current (DC)         | IF     | 50         | mA   |
| Forward Current (Pulse)*1    | IFP    | 0.5        | A    |
| Reverse Voltage              | VR     | 5          | V    |
| Power Dissipation            | PD     | 110        | mW   |
| Operating Temperature Range  | Topr   | -20 ~ +85  | °C   |
| Storage Temperature Range    | Tstg   | -30 ~ +100 | °C   |
| Junction Temperature         | Tj     | 100        | °C   |
| Lead Soldering Temperature*2 | Tls    | 260        | °C   |

\*1: Tw=10μsec, T=10msec. \*2: Time 5 Sec max, Position: Up to 3mm from the body.

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

| ITEMS                         | SYMBOL | CONDITIONS | MIN | TYP  | MAX | UNIT  |
|-------------------------------|--------|------------|-----|------|-----|-------|
| Power Output                  | PO     | IF=20mA    | 1.5 | 3.0  | --  | mW    |
| Forward Voltage               | VF     | IF=20mA    | --  | 1.8  | 2.2 | V     |
| Reverse Current               | IR     | VR=5V      | --  | --   | 100 | μA    |
| Peak Emission Wavelength      | λp     | IF=20mA    | --  | 660  | --  | nm    |
| Spectral Line Half Width      | Δλ     | IF=20mA    | --  | 25   | --  | nm    |
| Half Intensity Beam Angle     | Θ      | IF=20mA    | --  | ±20  | --  | deg   |
| Rise Time                     | Tr     | IFP=20mA   | --  | 30   | --  | nS    |
| Fall Time                     | Tf     | IFP=20mA   | --  | 30   | --  | nS    |
| Junction Capacitance          | Cj     | 1MHz, V=0V | --  | 20   | --  | pF    |
| Temperature Coefficient of PO | P/T    | IF=10mA    | --  | -0.5 | --  | %/°C  |
| Temperature Coefficient of VF | V/T    | IF=10mA    | --  | -1.5 | --  | mV/°C |



Unit: mm, Tolerance:  $\pm 0.2$

