

Peak Emission Wavelength: 880nm

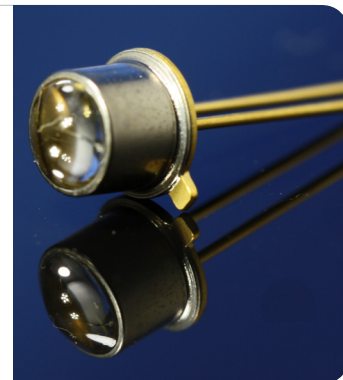
The 880nm IR emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

FEATURES

- > TO-18 Metal Can Domed Package
- > High Output Power
- > Narrow Beam Angle
- > High Reliability

APPLICATIONS

- > Optical Switches / Security Systems
- > Linear & Rotary Encoder
- > Remote Controls / Robotics
- > Card Readers / Medical Electronics



Absolute Maximum Ratings (Ta=25°C)

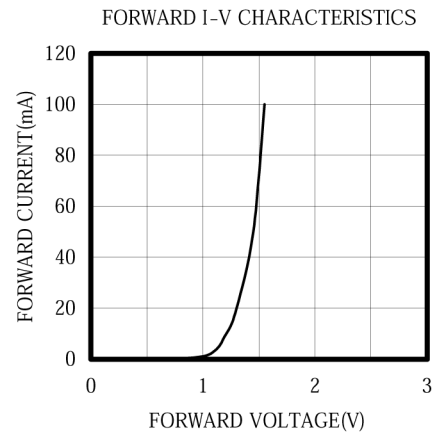
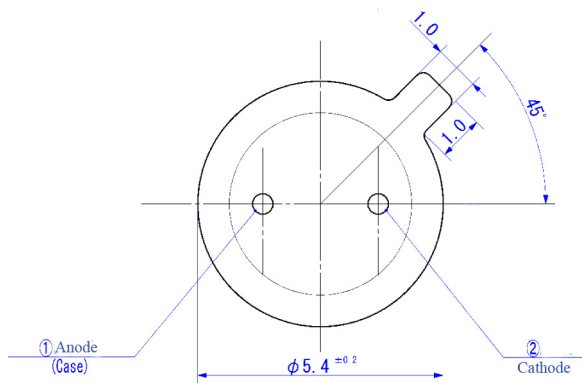
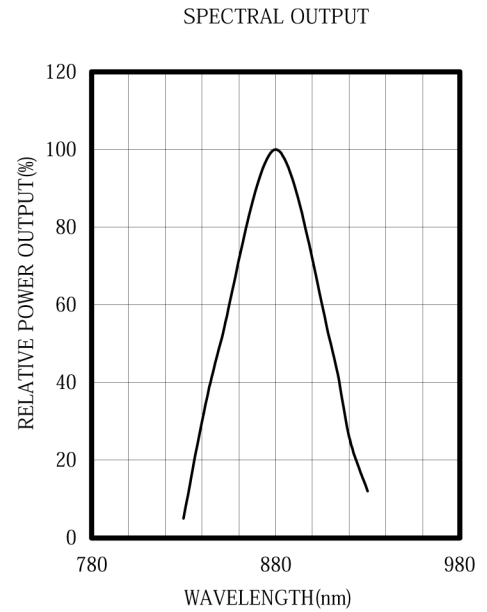
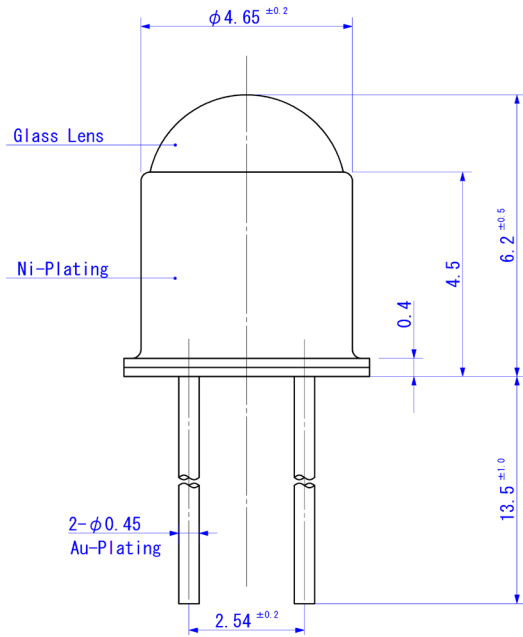


| ITEMS | SYMBOL | RATINGS | UNIT |
|------------------------------|--------|------------|------|
| Forward Current (DC) | IF | 100 | mA |
| Forward Current (Pulse)*1 | IFP | 1 | A |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 180 | mW |
| Operating Temperature Range | Topr | -20 ~ +85 | °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=50mA | -- | 6.0 | -- | mW |
| Forward Voltage | VF | IF=50mA | -- | 1.45 | 1.8 | V |
| Reverse Current | IR | VR=5V | -- | -- | 10 | μA |
| Peak Emission Wavelength | λp | IF=50mA | -- | 880 | -- | nm |
| Spectral Line Half Width | Δλ | IF=50mA | -- | 60 | -- | nm |
| Half Intensity Beam Angle | Θ | IF=50mA | -- | ±6 | -- | deg |
| Rise Time | Tr | IFP=50mA | -- | 1.5 | -- | μS |
| Fall Time | Tf | IFP=50mA | -- | 0.8 | -- | μS |
| Junction Capacitance | Cj | 1MHz, V=0V | -- | 15 | -- | 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: ± 0.2

