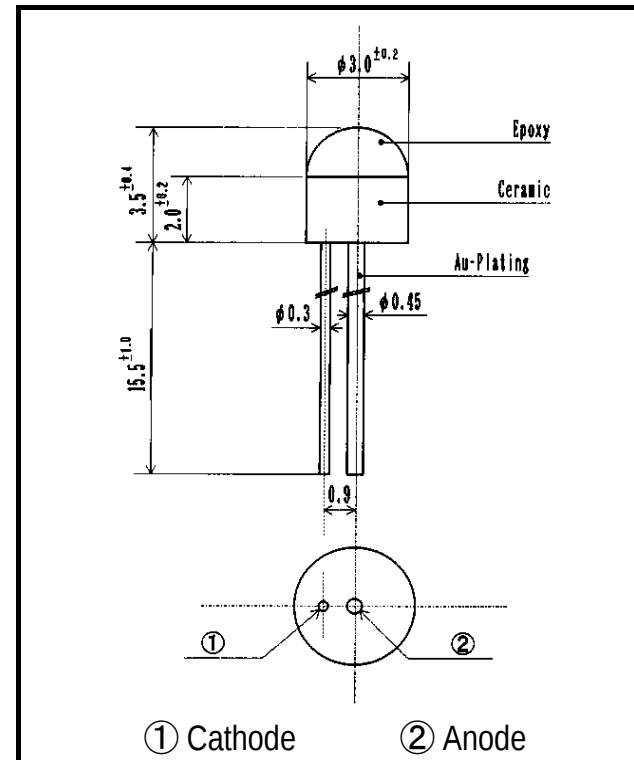




- FEATURES**
- High-output Power
  - Compact
  - High Reliability
- APPLICATIONS**
- Optical Switches
  - Optical Sensors

## 1. ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

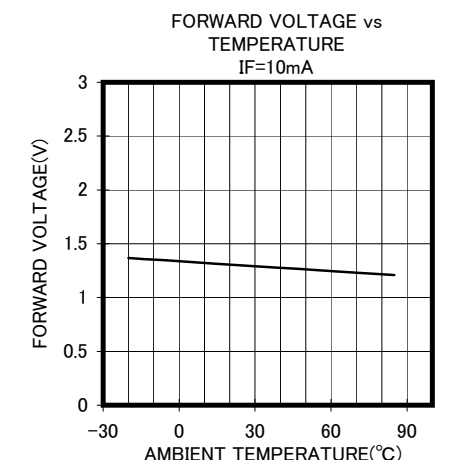
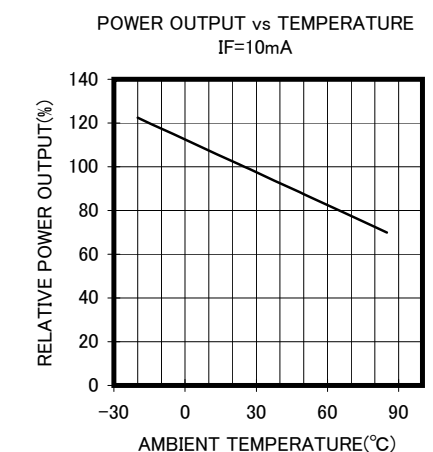
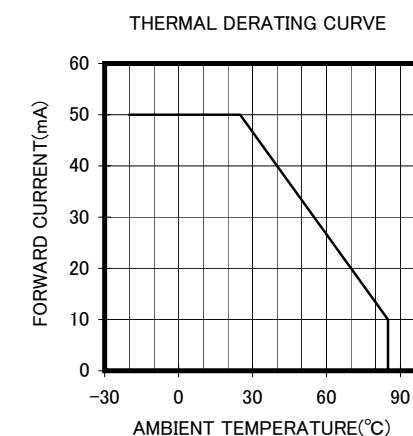
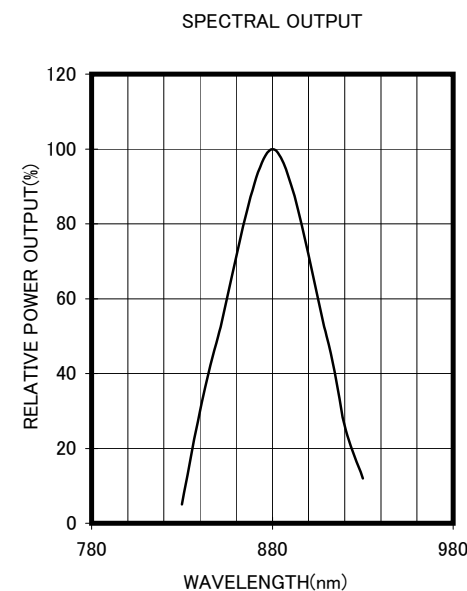
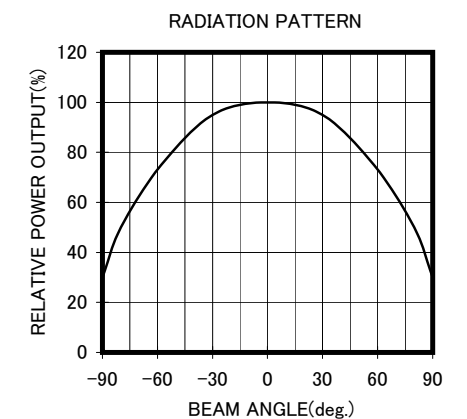
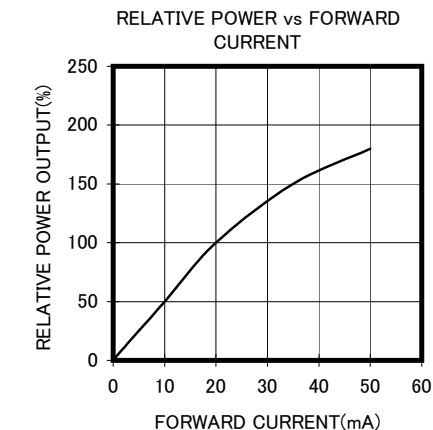
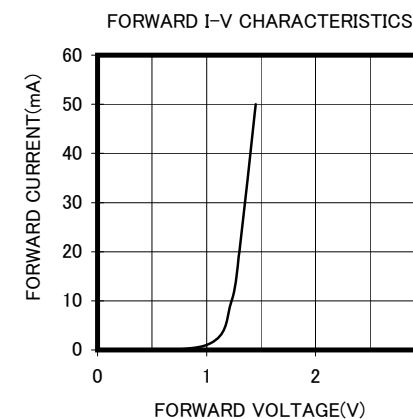
| ITEM                      | SYMBOL | RATINGS    | UNIT |
|---------------------------|--------|------------|------|
| Forward Current (DC)      | IF     | 50         | mA   |
| Forward Current (Pulse)*1 | IFP    | 0.5        | A    |
| Reverse Voltage           | VR     | 5          | V    |
| Power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

\*1:Tw=10uS,T=10mS

\*2:Time 5 Sec max,Position:Up to 3mm from the body

## 2.ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25°C)

| ITEM                      | SYMBOL | CONDITIONS | MIN | TYP  | MAX | UNIT  |
|---------------------------|--------|------------|-----|------|-----|-------|
| Power Output              | PO     | IF=20mA    |     | 4.5  |     | mW    |
| Forward Voltage           | VF     | IF=20mA    |     | 1.3  | 1.6 | V     |
| Reverse Current           | IR     | VR=5V      |     |      | 10  | μA    |
| Peak Wavelength           | λp     | IF=20mA    |     | 880  |     | nm    |
| Spectral Line Half Width  | Δλ     | IF=20mA    |     | 60   |     | nm    |
| Half Intensity Beam Angle | θ      | IF=20mA    |     | ±80  |     | 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    |
| Temp. Coefficient of PO   | P/T    | IF=10mA    |     | -0.5 |     | %/°C  |
| Temp. Coefficient of VF   | V/T    | IF=10mA    |     | -1.5 |     | mV/°C |



**OPTRANS**

To purchase this part contact  
Marktech Optoelectronics at  
**800.984.5337**

**Marktech**  
Optoelectronics  
www.marktechopto.com

