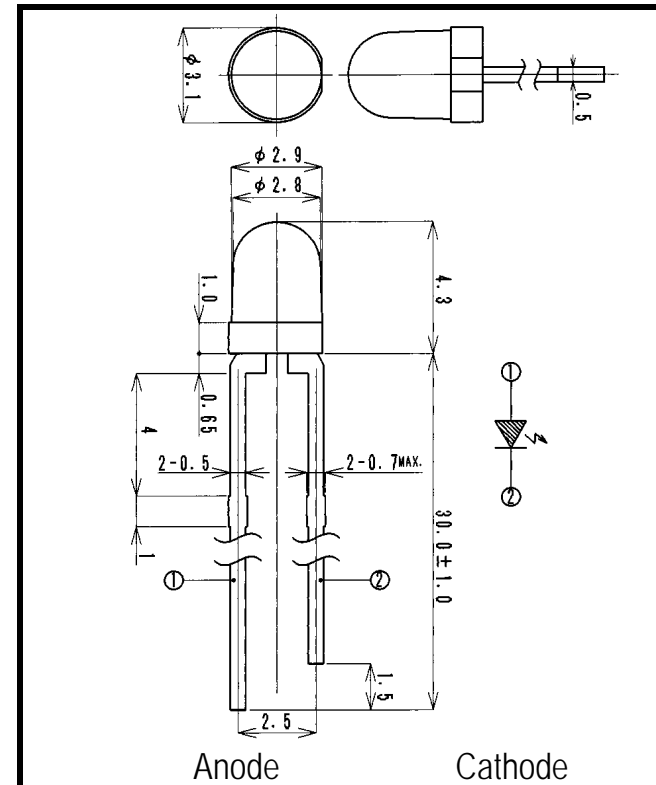


# VSF666C1

# Visible Light Emitting Diode



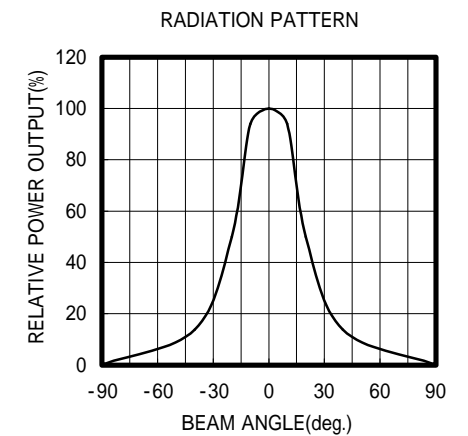
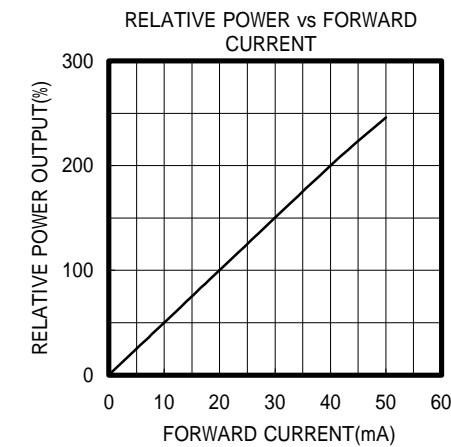
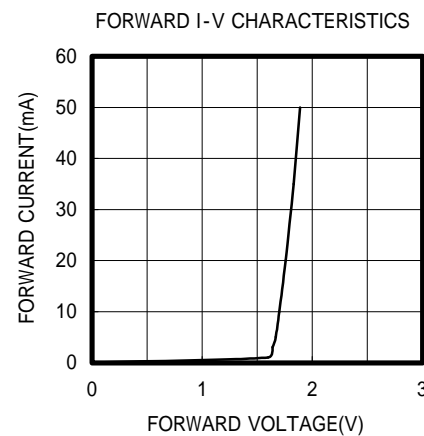
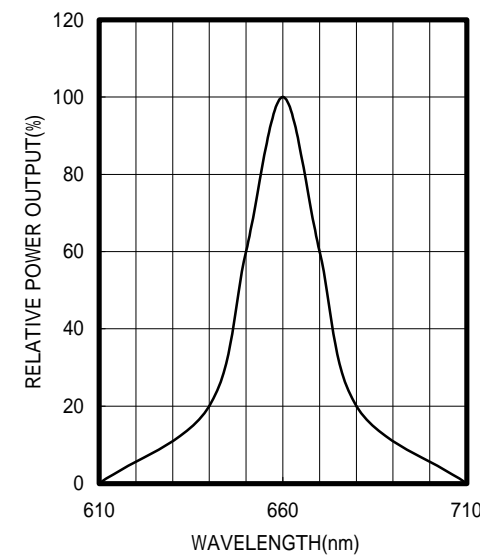
Anode Cathode  
Dimensions (Unit:mm)

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

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

| ITEM                      | SYMBOL | CONDITIONS | MIN | TYP  | MAX | UNIT  |
|---------------------------|--------|------------|-----|------|-----|-------|
| Power Output              | PO     | IF=20mA    | 2.5 | 5.0  |     | mW    |
| Forward Voltage           | VF     | IF=20mA    |     | 1.8  | 2.2 | V     |
| Reverse Current           | IR     | VR=5V      |     |      | 100 | μA    |
| Peak Wavelength           | λ      | IF=20mA    |     | 660  |     | nm    |
| Spectral Line Half Width  |        | IF=20mA    |     | 25   |     | nm    |
| Half Intensity Beam Angle |        | 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    |
| Temp. Coefficient of PO   | P/T    | IF=10mA    |     | -0.5 |     | %/°C  |
| Temp. Coefficient of VF   | V/T    | IF=10mA    |     | -1.5 |     | mV/°C |

SPECTRAL OUTPUT

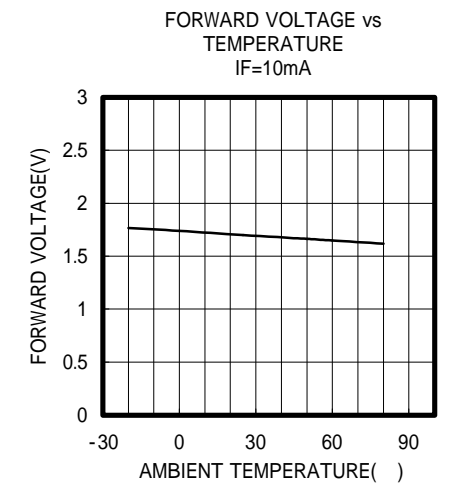
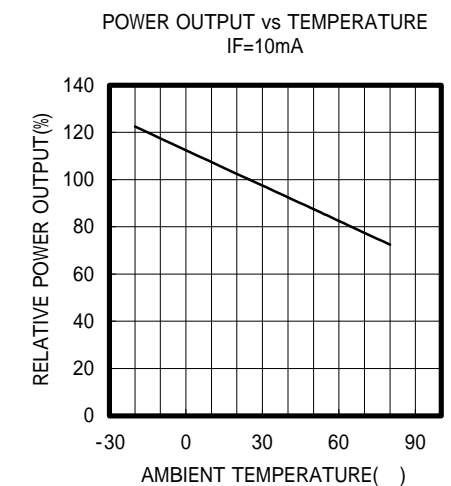
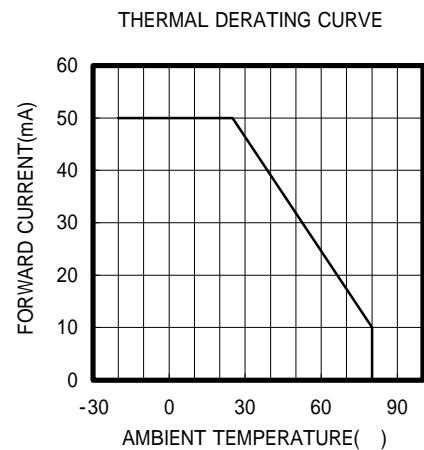


## 1. ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

| 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     | 110        | mW   |
| Operating Temp.           | Topr   | -20 TO 80  |      |
| Storage Temp.             | Tstg   | -30 TO 100 |      |
| Junction Temp.            | Tj     | 100        |      |
| Lead Soldering Temp.*2    | Tls    | 260        |      |

\*1: Tw=10μs, T=10mS

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



OPTRANS

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