

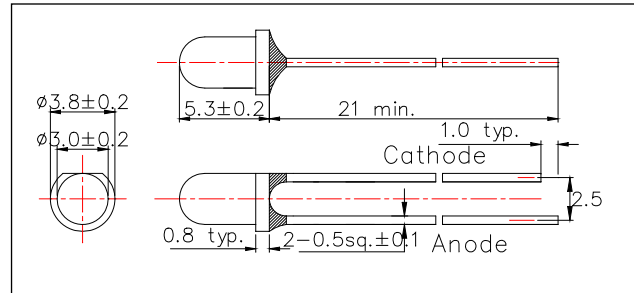
**L405R-33****UV LED Lamp with UV Resistant Resin**

L405R-33 is an InGaN LED mounted on a lead frame with UV resistant resin.  
On forward bias, it emits a band of UV light that peaks 405nm.  
This UV series is designed for long life under UV beam.

## &lt;Specifications&gt;

1. Product Name: UV LED Lamp
2. Type Number: L405R-33
3. Chip:
  - Chip material: InGaN
  - Peak Wavelength: 405nm typ.
4. Package
  - Type: Φ3mm clear molding
  - Resin Material: Epoxy Resin
  - Lead Frame: Soldered(Lead Free)

## Outer Dimension (Unit:mm)



| Absolute Maximum Ratings[Ta=25°C] |        |                     |      |
|-----------------------------------|--------|---------------------|------|
| Item                              | Symbol | Maximum Rated Value | Unit |
| Power Dissipation                 | PD     | 200                 | mW   |
| Forward Current                   | IF     | 50                  | mA   |
| Pulse Forward Current*            | IFP    | 100                 | mA   |
| Reverse Voltage                   | VR     | 5                   | V    |
| Thermal Resistance                | Rthja  | 270                 | K/W  |
| Junction Temperature              | Tj     | 120                 | °C   |
| Operating Temperature             | TOPR   | -20 ~ +100          | °C   |
| Storage Temperature               | TSTG   | -20 ~ +100          | °C   |
| Soldering Temperature**           | TSOL   | 250                 | °C   |

\* Duty=1% and Pulse Width=10μs

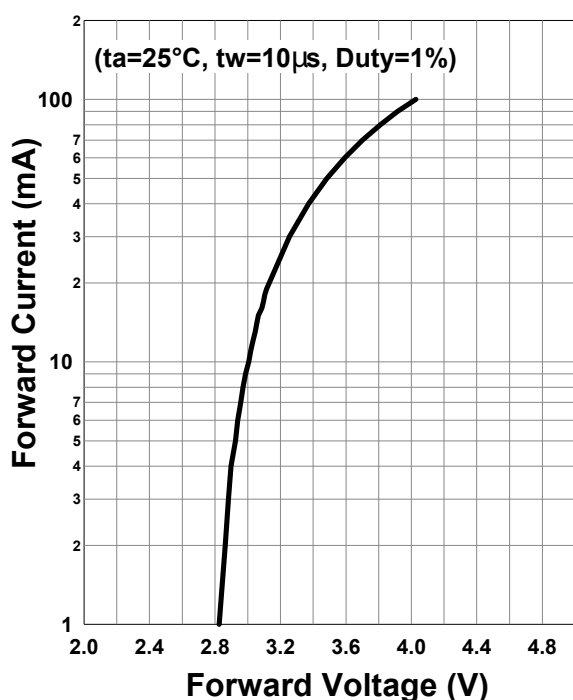
\*\* Soldering condition must be completed within 5 second at 250°C.

| Electro-Optical Characteristics [Ta=25°C ] |        |           |         |         |         |      |
|--------------------------------------------|--------|-----------|---------|---------|---------|------|
| Item                                       | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Forward Voltage                            | VF     | IF=20mA   |         | 3.1     | 4.0     | V    |
|                                            | VFP    | IFP=100mA |         | 4.0     |         |      |
| Radiated Power*                            | PO     | IF=20mA   |         | 26      |         | mW   |
|                                            |        | IFP=100mA |         | 110     |         |      |
| Peak Wavelength                            | λP     | IF=20mA   | 395     | 405     | 415     | nm   |
| Half Width                                 | Δλ     | IF=20mA   |         | 13      |         | nm   |
| Viewing Half Angle                         | θ1/2   | IF=20mA   |         | ±13     |         | deg  |
| Rise Time                                  | Tr     | IF=20mA   |         | 30      |         | ns   |
| Fall Time                                  | tf     | IF=20mA   |         | 30      |         | ns   |

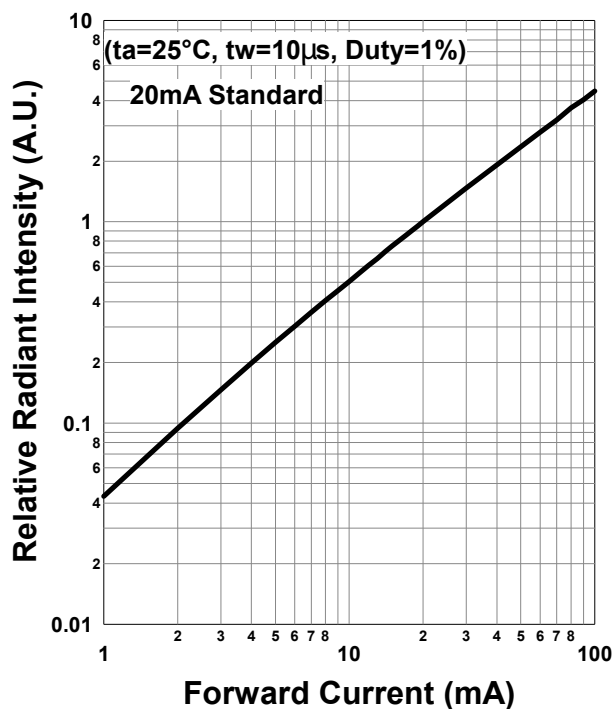
\* Measured by S3584-08



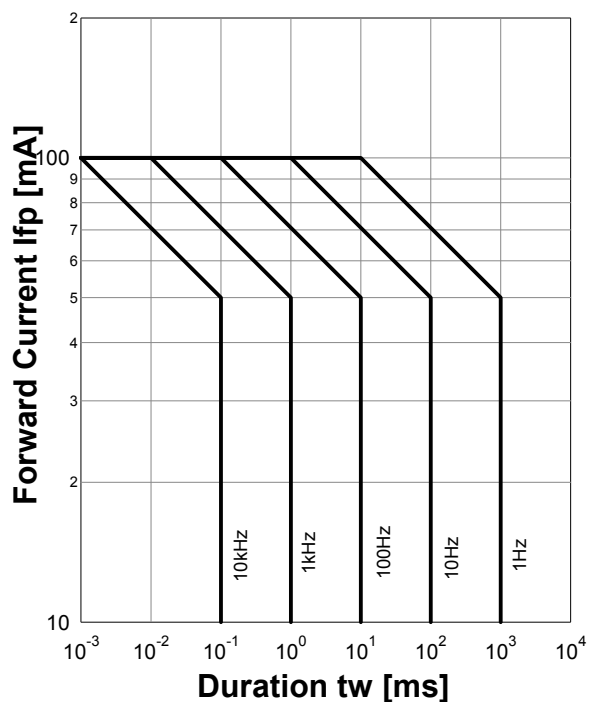
**Forward Current - Forward Voltage**



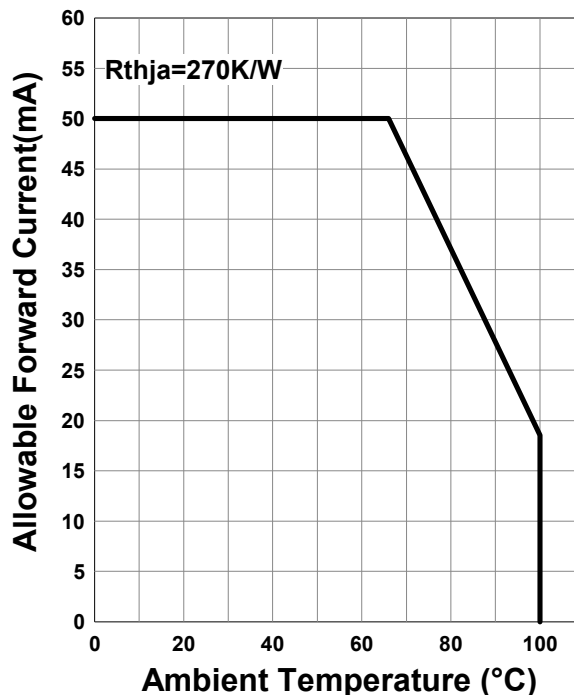
**Relative Radiant Intensity - Forward Current**

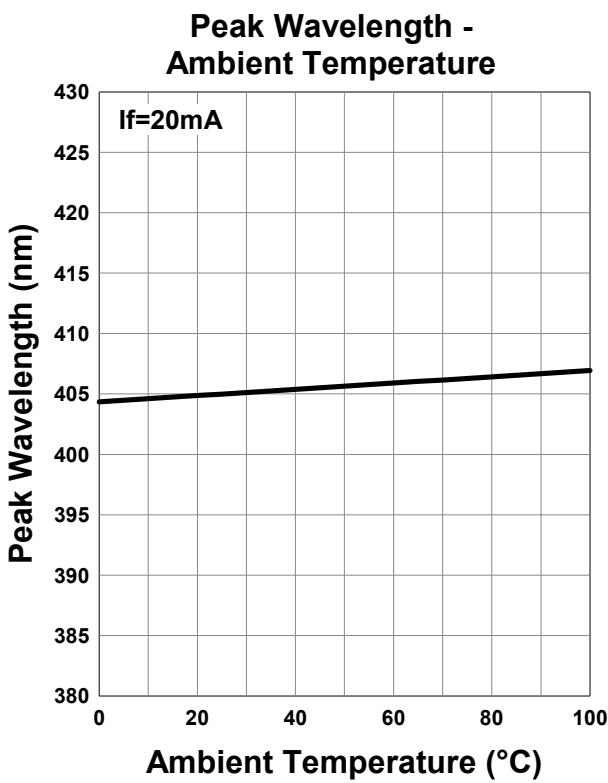
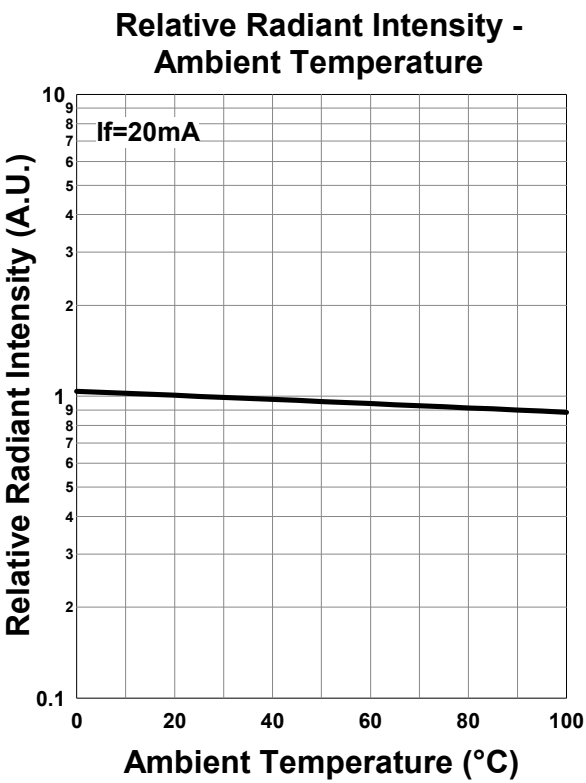
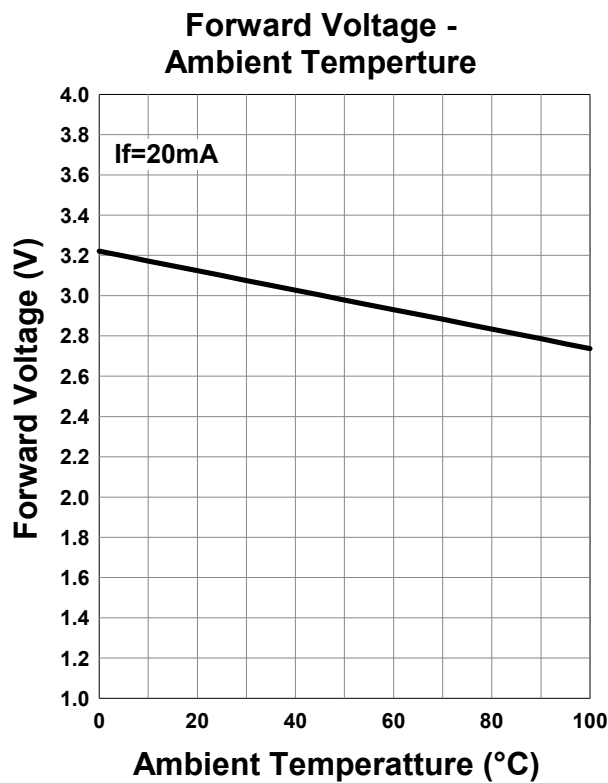


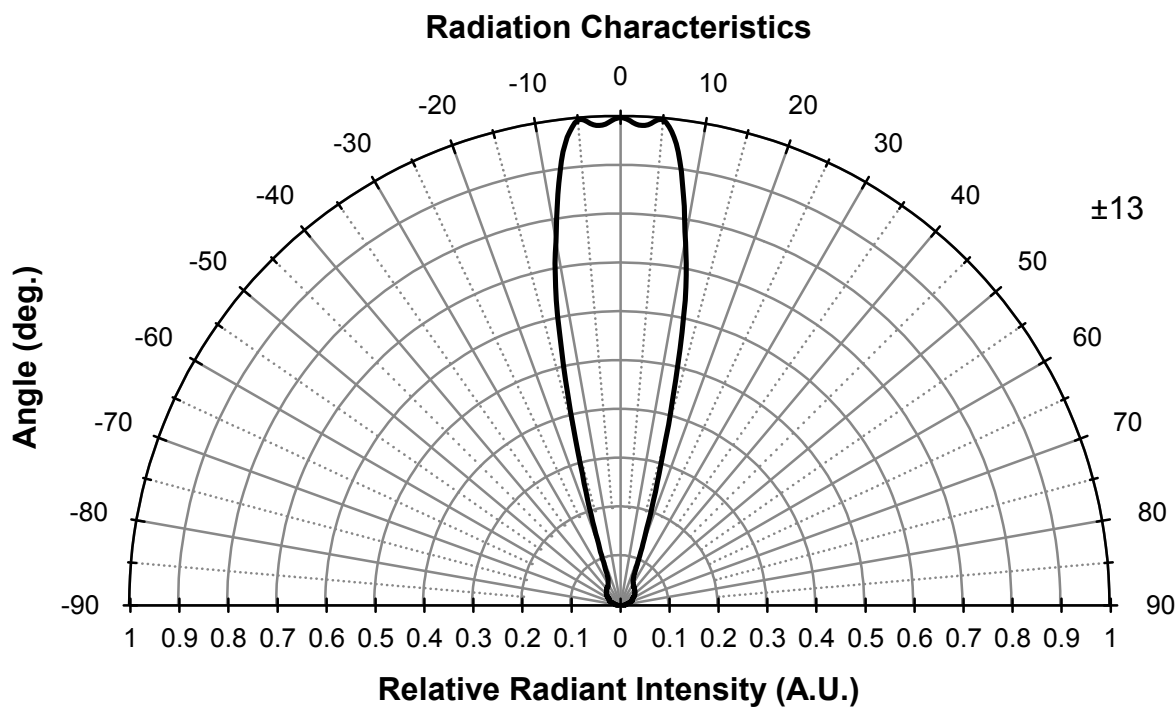
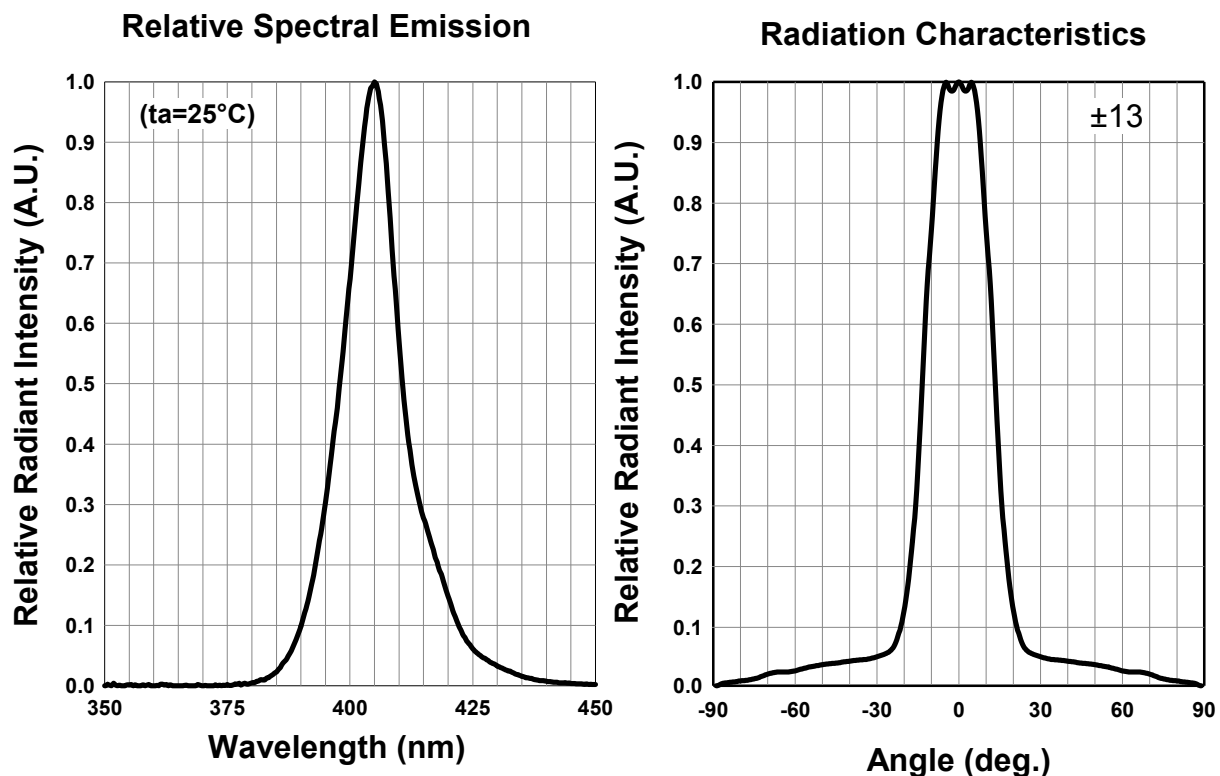
**Forward Current - Pulse Duration**



**Allowable Forward Current - Ambient Temperature**







**Disclaimer**

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Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

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