

# L525-33

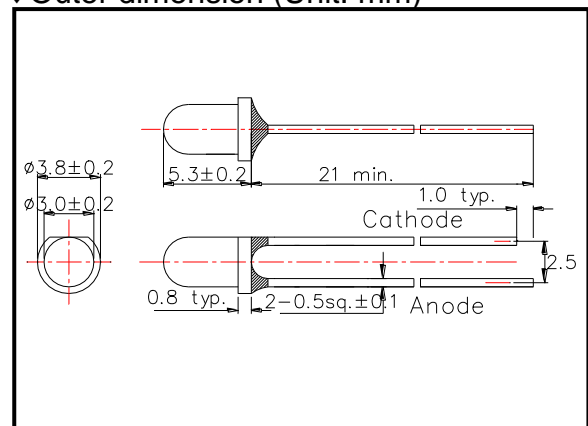
## Super Bright Green LED

L525-33 is an InGaN LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 525nm.

### ◆ Specifications

- |                     |                      |
|---------------------|----------------------|
| 1) Product Name     | Green LED Lamp       |
| 2) Type No.         | L525-33              |
| 3) Chip             |                      |
| (1) Chip Material   | InGaN                |
| (2) Peak Wavelength | 525nm typ.           |
| 4) Package          |                      |
| (1) Type            | Φ3mm clear molding   |
| (2) Resin Material  | Epoxy Resin          |
| (3) 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  | 250                 | K/W  |
| Junction Temperature  | Tj     | 120                 | °C   |
| Operating Temperature | TOPR   | -40 ~ +100          | °C   |
| Storage Temperature   | TSTG   | -40 ~ +100          | °C   |
| Soldering Temperature | TSOL   | 250                 | °C   |

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

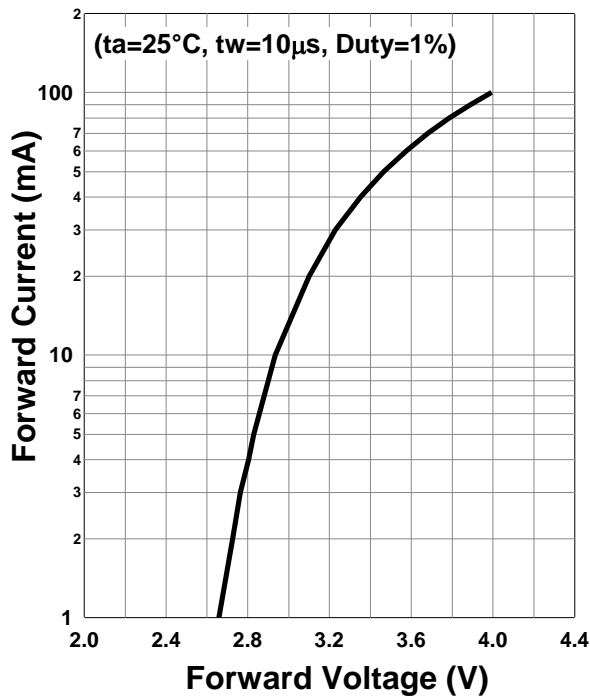
## ◆ Electro-Optical Characteristics [Ta=25°C typ.]

| 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   |         | 11      |         | mW    |
|                     |                 | IFP=100mA |         | 34      |         |       |
| Brightness          | Iv              | IF=20mA   |         | 11000   |         | mcd   |
| Radiant Intensity   | IE              | IF=20mA   |         | 42      |         | mW/sr |
|                     |                 | IFP=100mA |         | 130     |         |       |
| Peak Wavelength     | $\lambda_P$     | IF=20mA   | 515     | 525     | 535     | nm    |
| Dominant Wavelength | $\lambda_D$     | IF=20mA   |         | 530     |         | nm    |
| Half Width          | $\Delta\lambda$ | IF=20mA   |         | 30      |         | nm    |
| Viewing Half Angle  | $\theta_{1/2}$  | IF=20mA   |         | ±12     |         | deg.  |
| Rise Time           | tr              | IF=20mA   |         | 150     |         | ns    |
| Fall Time           | tf              | IF=20mA   |         | 200     |         | ns    |

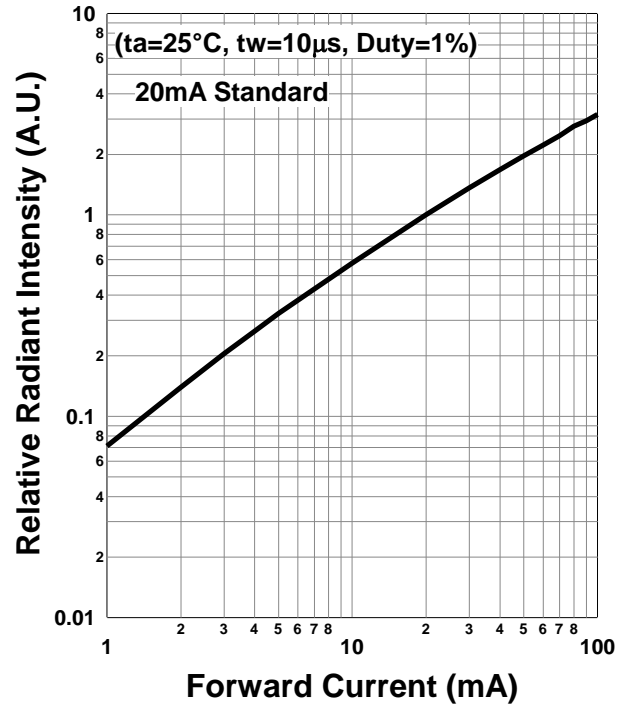
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2007 Condition B.

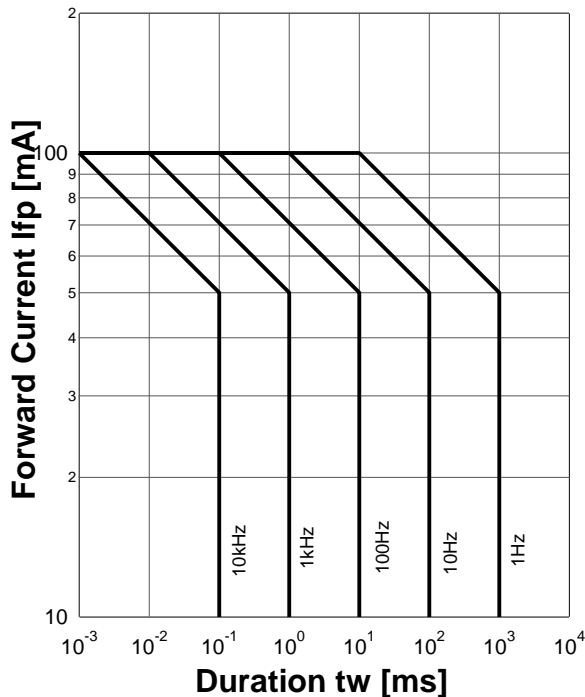
Forward Current - Forward Voltage



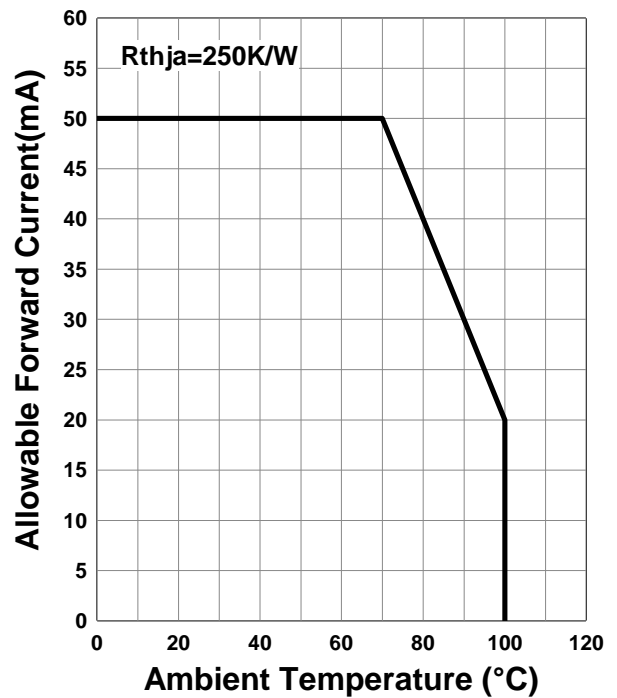
Relative Radiant Intensity - Forward Current



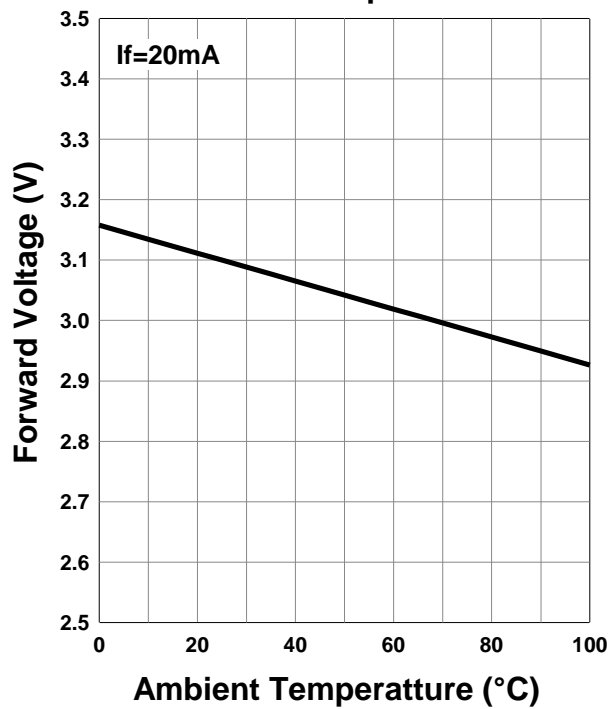
Forward Current - Pulse Duration



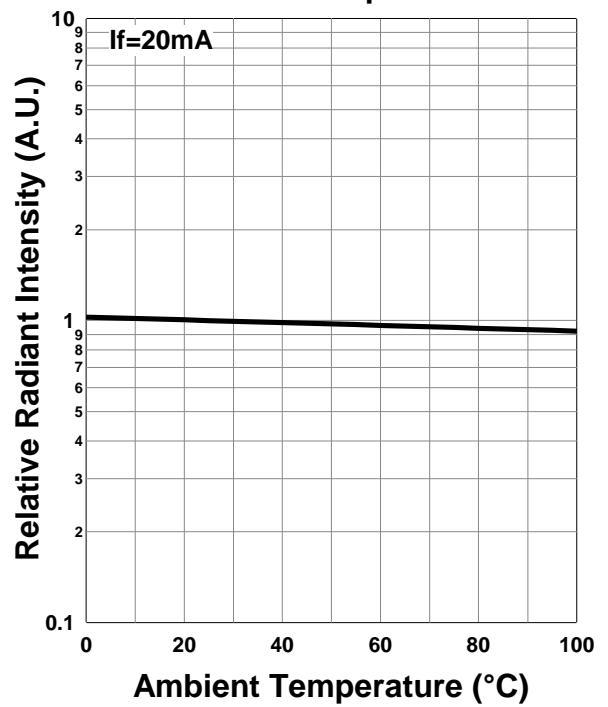
Allowable Forward Current - Ambient Temperature



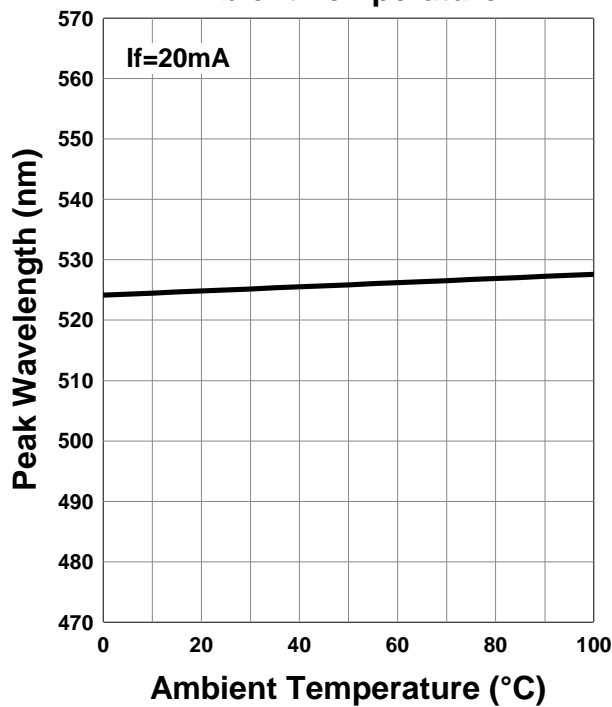
**Forward Voltage - Ambient Temperature**



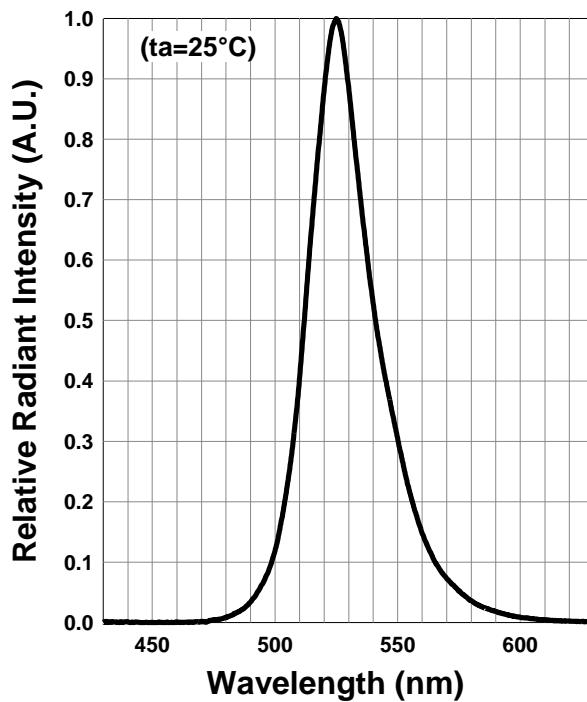
**Relative Radiant Intensity - Ambient Temperature**



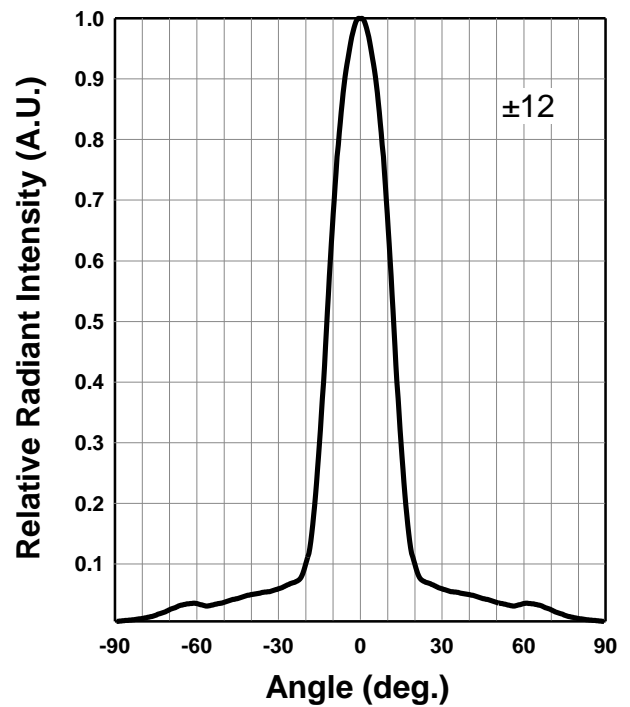
**Peak Wavelength - Ambient Temperature**



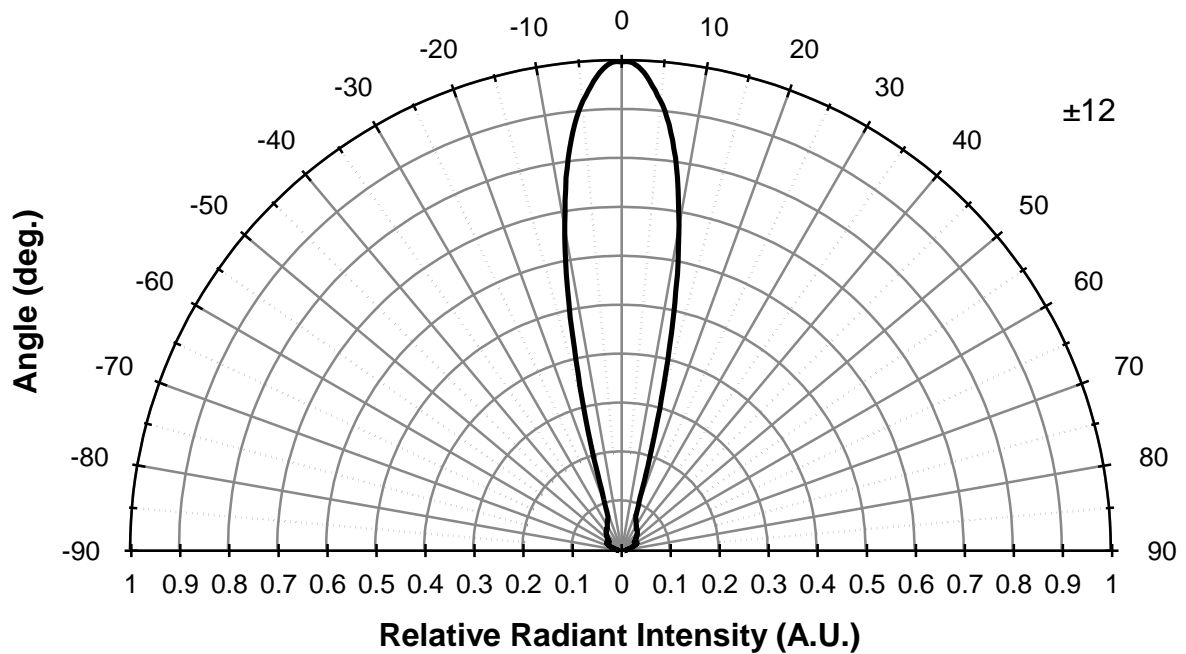
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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