

## Series L3 / Ø 3mm

Colour: blue

Sloan Part No.: L3-B41G-WTU

### Electrical and Optical Characteristics (T<sub>A</sub> = 25°C)

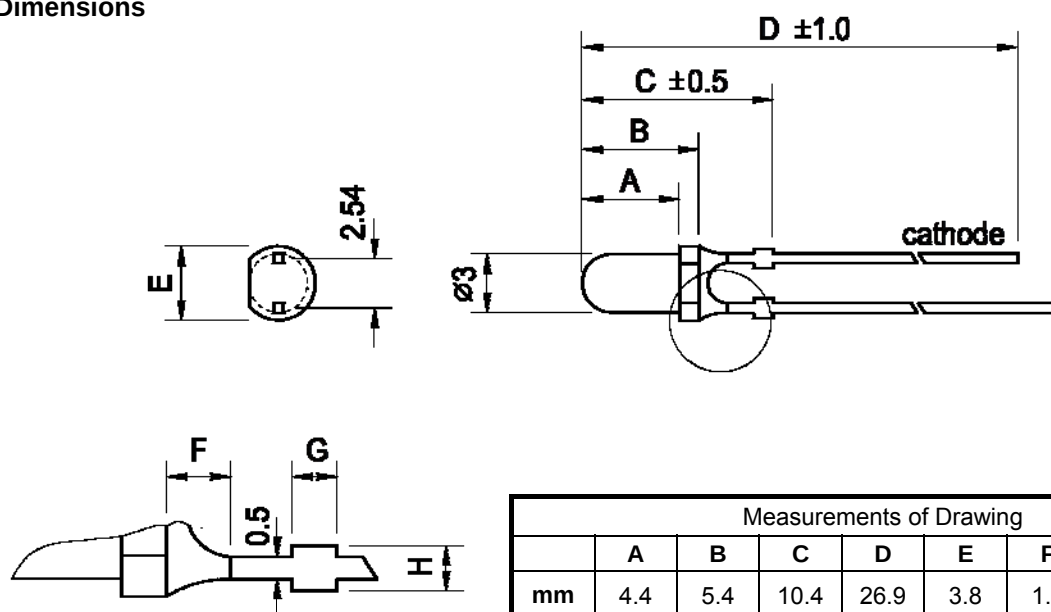
| Chip           |                                           |                                               | Lens        | Absolute Maximum Rating |            |            |                 | Electro-Optical-Data's<br>at 20mA |      |                                               |      |      | Viewing Angle<br>2 θ ½<br>(deg) |
|----------------|-------------------------------------------|-----------------------------------------------|-------------|-------------------------|------------|------------|-----------------|-----------------------------------|------|-----------------------------------------------|------|------|---------------------------------|
| Emitted Colour | Peak Wavelength<br>λ <sub>p</sub><br>(nm) | Dominant Wavelength<br>λ <sub>p</sub><br>(nm) |             | Δλ<br>(nm)              | Pd<br>(mW) | If<br>(mA) | Peak If<br>(mA) | Forward Voltage Vf<br>(V)         |      | Luminous Intensity<br>I <sub>v</sub><br>(mcd) |      |      |                                 |
|                |                                           |                                               |             |                         |            |            |                 | typ.                              | max. | min.                                          | typ. | max. |                                 |
| blue           | 470                                       | 470                                           | water clear | -                       | 123        | 35         | *110            | 3.2                               | 3.5  | 1380                                          | 2070 | 2760 | 30°                             |

\*Peak Forward Current (1/10 Duty Cycle, 10ms Pulse Width)

### Absolute Maximum Ratings (T<sub>A</sub> = 25°C)

|                                                 |                      |
|-------------------------------------------------|----------------------|
| Reverse Voltage                                 | 5V                   |
| Reverse Current (V <sub>R</sub> = 5V)           | ≤50μA                |
| Operating Temperature Range                     | - 30°C ~ +85°C       |
| Storage Temperature Range                       | - 40°C ~ +100°C      |
| Lead Soldering Temperature (3mm below the body) | 265°C for 10 seconds |

### Package Dimensions

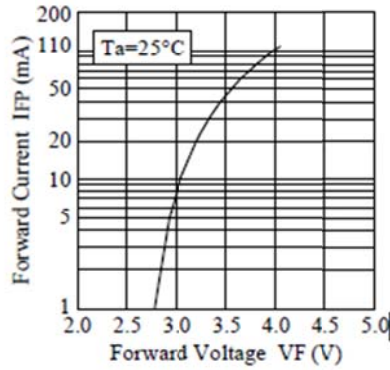


1. All dimensions are in millimetres.
2. Tolerance is ±0.25mm unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package
4. Specifications are subject to change without notice.

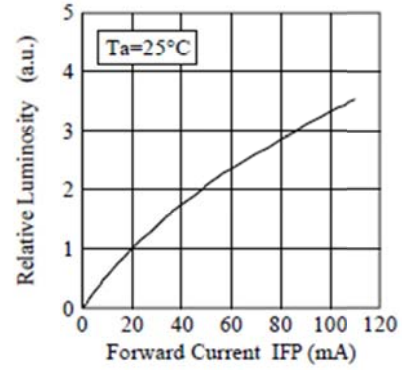
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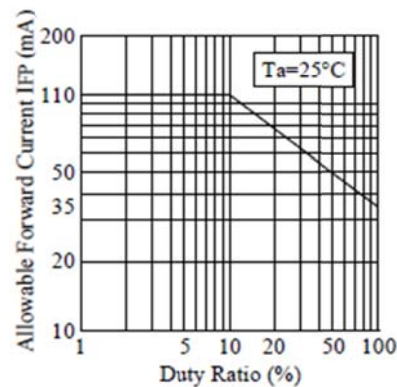
■ Forward Voltage vs.  
Forward Current



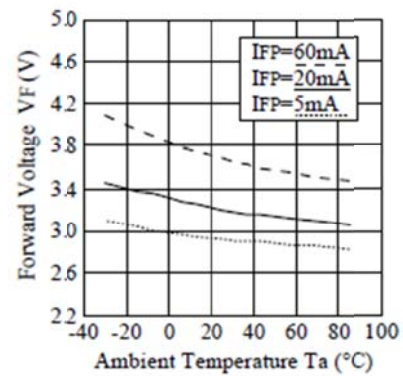
■ Forward Current vs.  
Relative Luminosity



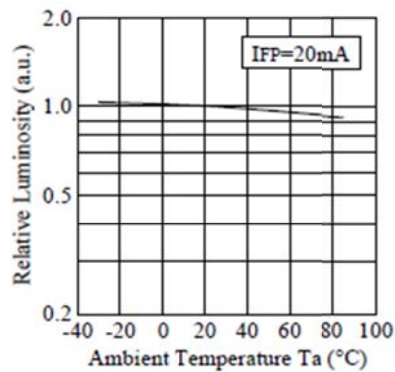
■ Duty Ratio vs.  
Allowable Forward Current



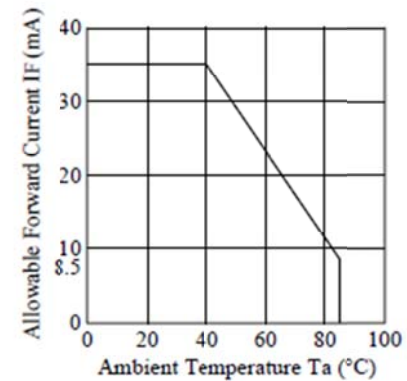
■ Ambient Temperature vs.  
Forward Voltage



■ Ambient Temperature vs.  
Relative Luminosity



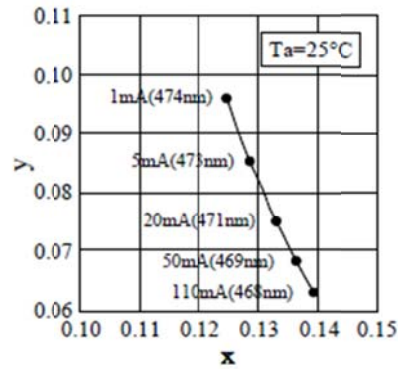
■ Ambient Temperature vs.  
Allowable Forward Current



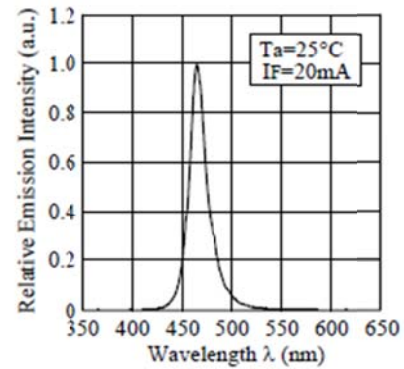
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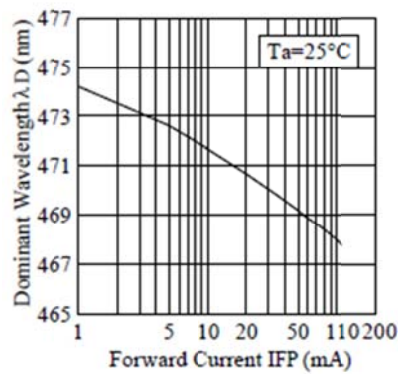
### ■ Forward Current vs. Chromaticity Coordinate ( $\lambda D$ )



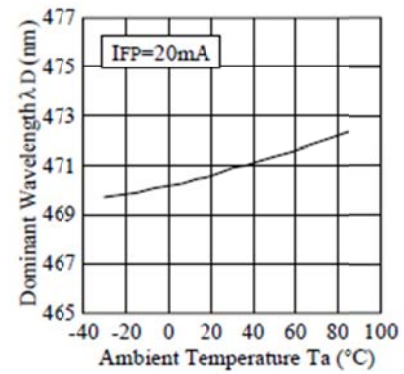
### ■ Spectrum



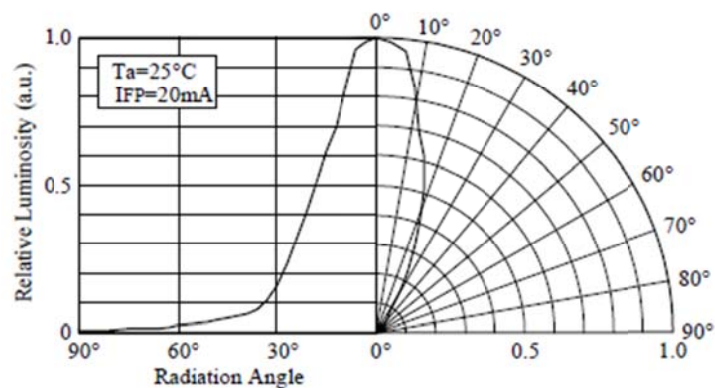
### ■ Forward Current vs. Dominant Wavelength



### ■ Ambient Temperature vs. Dominant Wavelength



### ■ Directivity



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**Soldering:**

| Dip Soldering    |                                                     | Hand Soldering |                                                      |
|------------------|-----------------------------------------------------|----------------|------------------------------------------------------|
| Pre-Heat         | 120°C Max.                                          | Temperature    | 350°C Max.                                           |
| Pre-Heat Time    | 60 seconds Max.                                     | Soldering Time | 3 seconds Max.                                       |
| Solder Bath      | 260°C Max.                                          | Position       | No closer than 3 mm from the base of the epoxy bulb. |
| Temperature      |                                                     |                |                                                      |
| Dipping Time     | 10 seconds Max.                                     |                |                                                      |
| Dipping Position | No lower than 3 mm from the base of the epoxy bulb. |                |                                                      |