

**Series L5 / Ø 5mm**

**Colour: blue**

**Sloan Part No.: L5-B91G-WUV**

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

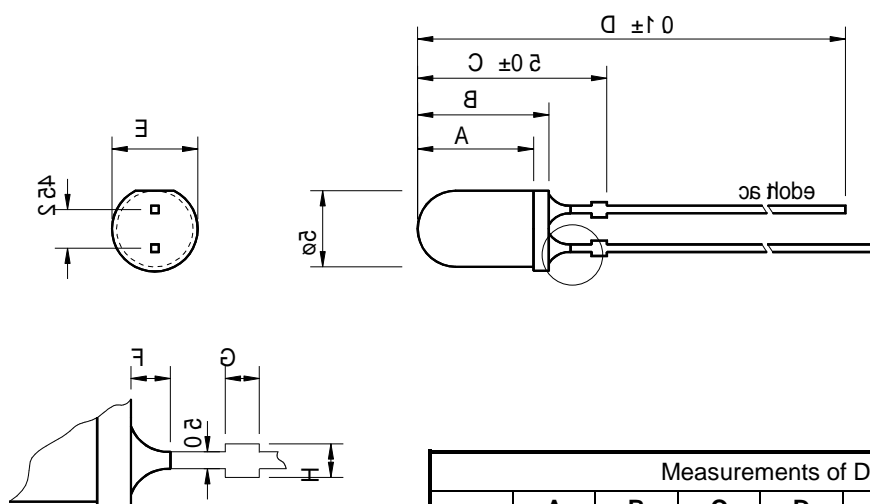
| Chip           |                                     |   | Lens        | Absolute Maximum Ratings |                     |                     |                          | Electro-Optical-Data's at 20mA     |      |   |      |      | Viewing Angle<br>2 θ ½ (deg) |
|----------------|-------------------------------------|---|-------------|--------------------------|---------------------|---------------------|--------------------------|------------------------------------|------|---|------|------|------------------------------|
| Emitted Colour | Peak Wavelength λ <sub>p</sub> (nm) | Dominant Wavelength λ <sub>p</sub> (nm) |             | Δλ (nm)                  | P <sub>d</sub> (mW) | I <sub>f</sub> (mA) | Peak I <sub>f</sub> (mA) | Forward Voltage V <sub>f</sub> (V) |      | Luminous Intensity I <sub>v</sub> (mcd) |      |      |                              |
|                |                                     |   |             |                          |                     |                     |                          | typ.                               | max. | min.                                    | typ. | max. |                              |
| Blue           | 470                                 | 470                                     | water clear | -                        | 123                 | 35                  | 110                      | 3.2                                | 3.5  | 4880                                    | 7300 | 9750 | 15°                          |

\*Peak Forward Current (1/10 Duty Cycle, 10µs 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**



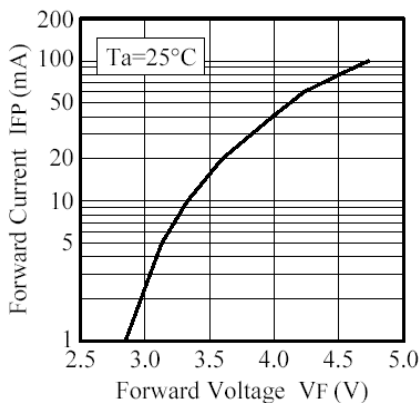
| Measurements of Drawing |     |     |      |      |     |     |     |     |
|-------------------------|-----|-----|------|------|-----|-----|-----|-----|
|                         | A   | B   | C    | D    | E   | F   | G   | H   |
| mm                      | 7.6 | 8.6 | 12.4 | 28.9 | 5.6 | 1.5 | 1.0 | 1.1 |

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.

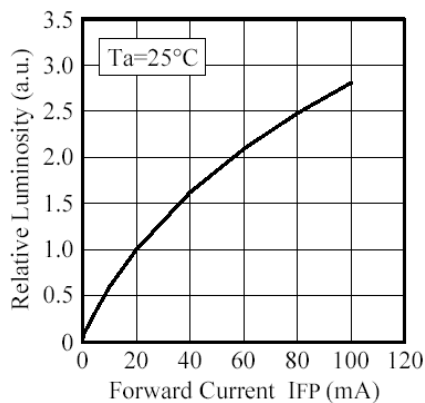
Sloan Part No.: L5-B91G-WUV

Electrical and Optical Characteristics ( $T_A = 25^\circ\text{C}$ )

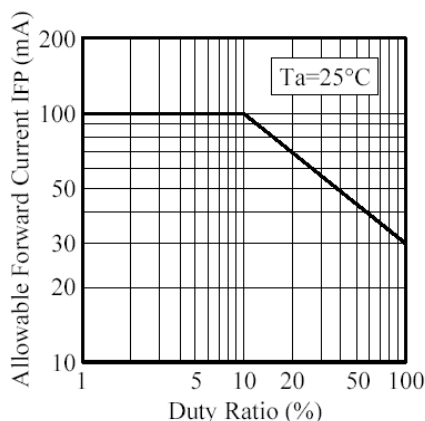
**Forward Voltage vs.  
Forward Current**



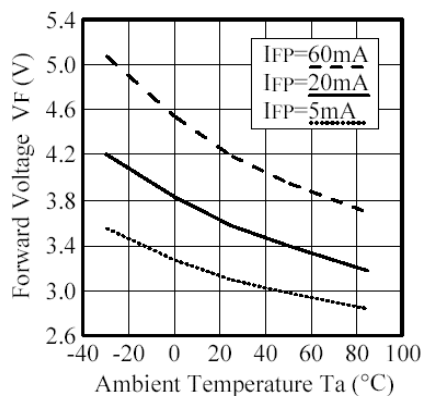
**Forward Current vs.  
Relative Luminosity**



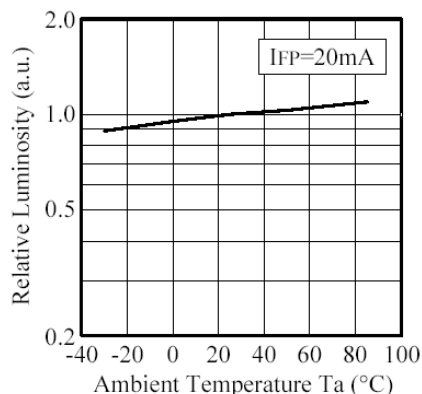
**Duty Ratio vs.  
Allowable Forward Current**



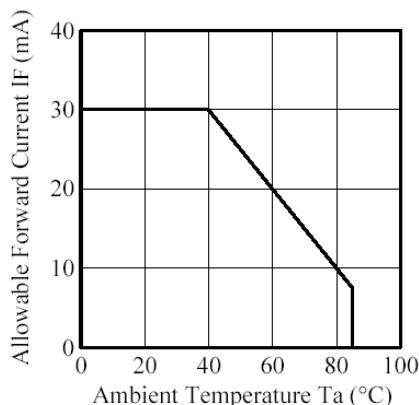
**Ambient Temperature vs.  
Forward Voltage**



**Ambient Temperature vs.  
Relative Luminosity**



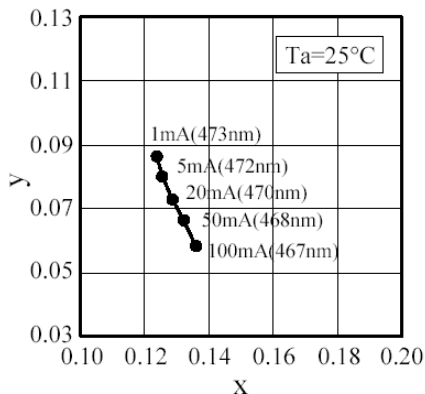
**Ambient Temperature vs.  
Allowable Forward Current**



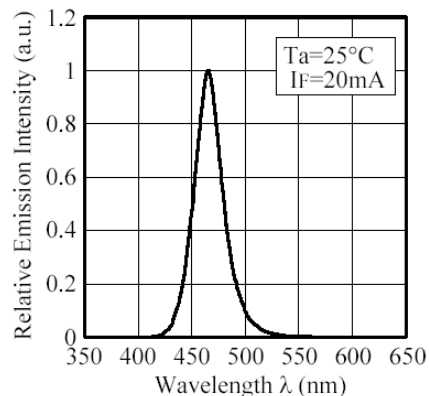
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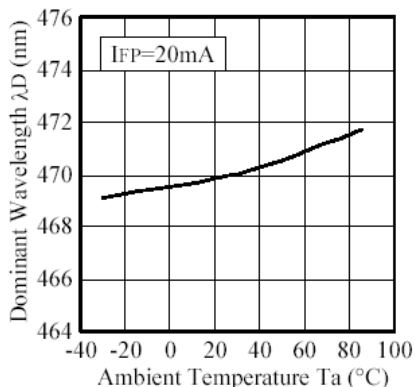
Forward Current vs. Chromaticity Coordinate



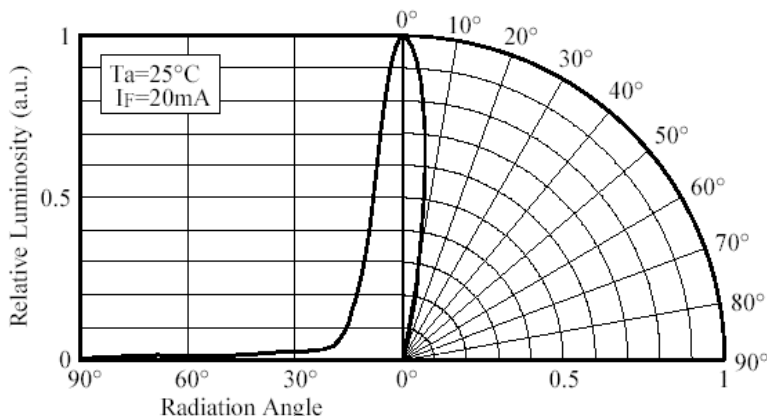
Spectrum



Ambient Temperature vs. Dominant Wavelength



Directivity



Recommended Soldering Conditions:

| 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. |                |  |