

## Series L5 / Ø 5mm

Colour: white

Sloan Part No.: L5-W55N-BVW

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

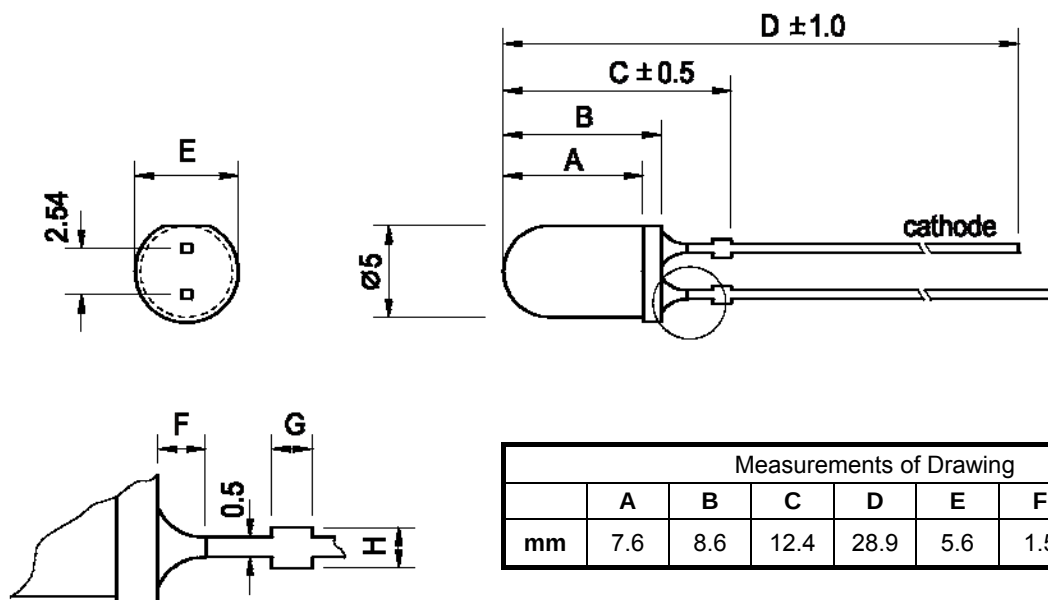
| Chip           |                            |                            | Lens        | Absolute Maximum Ratings |            |            |                 | Electro-Optical-Data's<br>at 20mA |      |                                   |        |        | Viewing Angle<br>2 θ ½<br>(deg) |
|----------------|----------------------------|----------------------------|-------------|--------------------------|------------|------------|-----------------|-----------------------------------|------|-----------------------------------|--------|--------|---------------------------------|
| Emitted Colour | Chromaticity Coordinates   | Colour Temperature<br>(°K) |             | Δλ<br>(nm)               | Pd<br>(mW) | If<br>(mA) | Peak If<br>(mA) | Forward Voltage Vf<br>(V)         |      | Luminous Intensity<br>Iv<br>(mcd) |        |        |                                 |
|                |                            |                            |             |                          |            |            |                 | typ.                              | max. | min.                              | typ.   | max.   |                                 |
| white          | x=0.30-0.33<br>y=0.28-0.32 | 5500-9000                  | water clear | -                        | 105        | 30         | 100*            | 3.2                               | 3.5  | 22'000                            | 33'000 | 44'000 | 15°                             |

\* 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            | 265°C for 10 seconds |

### Package Dimensions

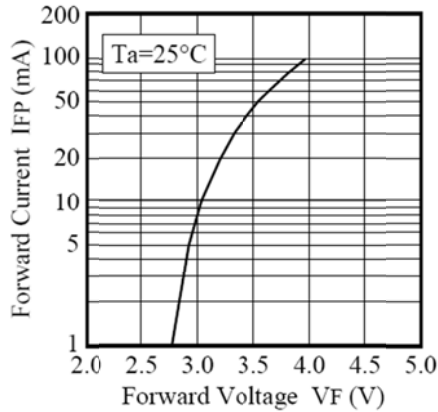


1. All dimensions are in millimetres.
2. Tolerance is ±0.25mm unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package
4. Specifications are subject to change without notice.

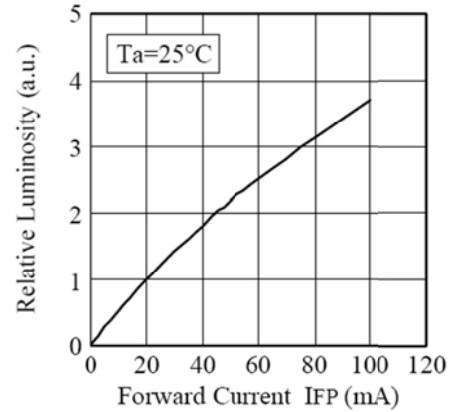
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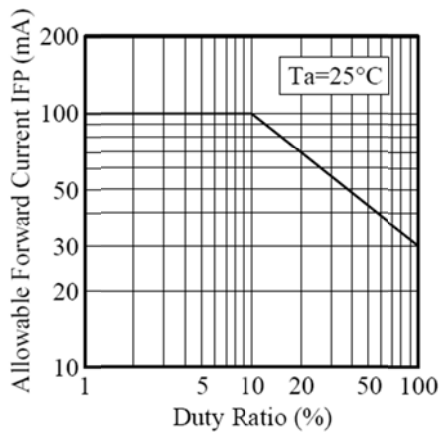
#### Forward Voltage vs. Forward Current



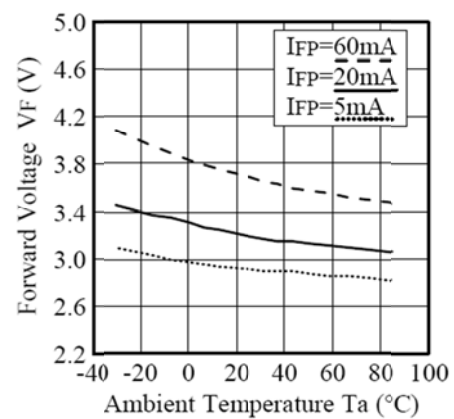
#### Forward Current vs. Relative Luminosity



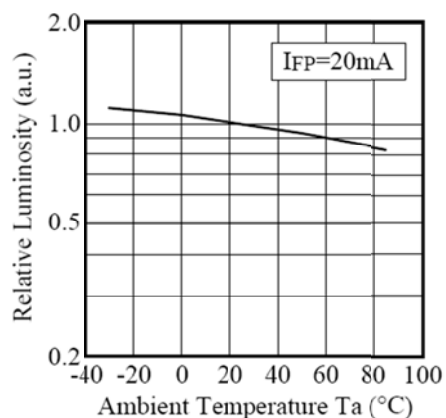
#### Duty Ratio vs. Allowable Forward Current



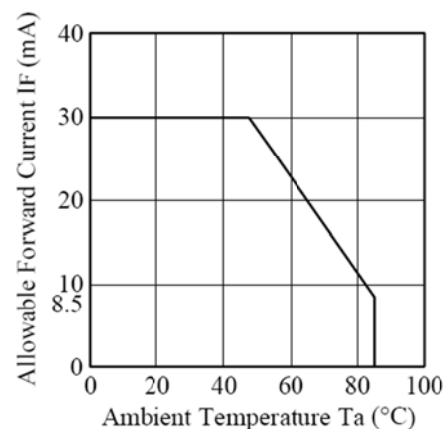
#### Ambient Temperature vs. Forward Voltage



#### Ambient Temperature vs. Relative Luminosity



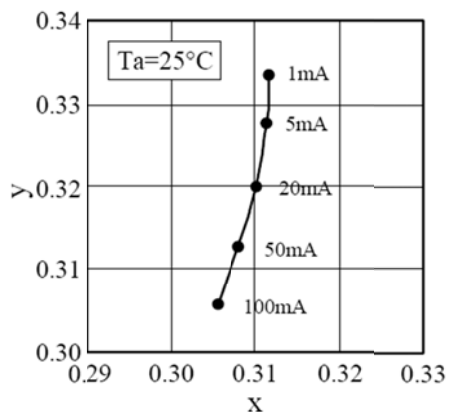
#### Ambient Temperature vs. Allowable Forward Current



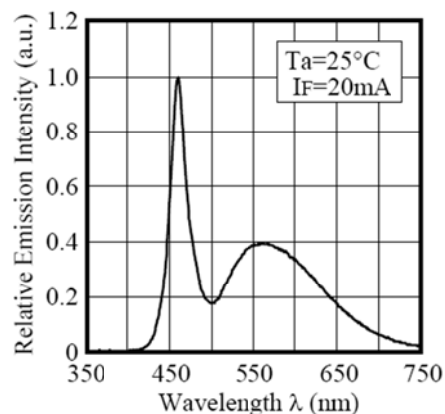
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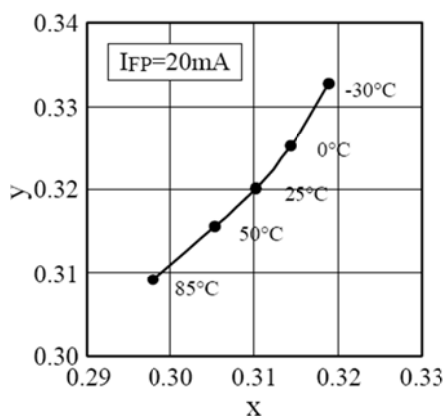
## Forward Current vs. Chromaticity Coordinate



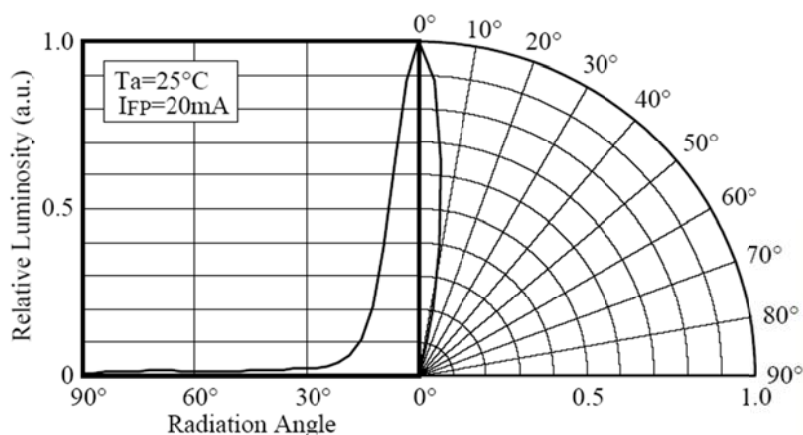
## Spectrum



## Ambient Temperature vs. Chromaticity Coordinate



## 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. |                |                                                      |