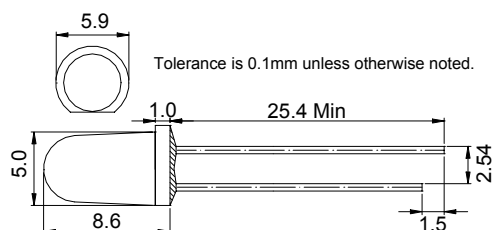


## Product Specification

### Device Part No:HUBG-5108L

#### Features :

- Lighting color : Bulish Green
- Lens Type : Water Clear
- Standard T-1 3/4PackageType
- High Intensity, Viewing Angle:30°



#### Application:

- Used in Traffic Sign Light
- Electronic Sign and Signals

1. All dimension are in millimeters.
2. Tolerance is  $\pm 0.20\text{mm}$  unless otherwise noted
3. Produced resin under flanger is 1.5mm max
4. Lead spacing is measured where the leads emerge from the package.
5. Specification are subject to change without notice

#### Absolute Maximum Ratings

(  $T_a = 25^\circ\text{C}$  )

| Series                      | Symbol            | Testing Condition                    | Characteristics |      | Unit  |
|-----------------------------|-------------------|--------------------------------------|-----------------|------|-------|
|                             |                   |                                      | Max.            | Min. |       |
| Power Dissipation           | Pd                | ---                                  | 120             | ---  | mW    |
| Reverse Voltage             | V <sub>R</sub>    | I <sub>R</sub> = 50 $\mu$ A          | ---             | 5    | V     |
| Peak Forward Current        | I <sub>peak</sub> | Duty=0.1 , 1kHz                      | 100             | ---  | mA    |
| Derating Linear             | I/C               | ---                                  | 0.5             | ---  | mA/°C |
| Operating Temperature Range | Topr              | ---                                  | +80             | -30  | °C    |
| Storage Temperature Range   | Tstr              | ---                                  | +100            | -40  | °C    |
| Lead Soldering Temperature  | Tsol              | 260°C for 5sec. ( 3.0mm from resin ) |                 |      |       |
| Anti-static Voltage         | 1000              |                                      |                 |      | V     |

#### Electro-Optical Characteristics

(  $T_a = 25^\circ\text{C}$  )

| Series                       | Symbol           | Testing Condition     | Characteristics |       |      | Unit       |
|------------------------------|------------------|-----------------------|-----------------|-------|------|------------|
|                              |                  |                       | Max.            | Typ.  | Min. |            |
| Forward Voltage              | V <sub>F</sub>   | I <sub>F</sub> = 20mA | 4.0             | 3.5   | ---- | V          |
| Reverse Current              | I <sub>R</sub>   | V <sub>R</sub> = 5V   | 100             | —     | —    | $\mu$ A    |
| Peak Emission Wavelength     | $\lambda_p$      | I <sub>F</sub> = 10mA | —               | 505   | —    | nm         |
| Spectrum Width of Half Value | $\Delta \lambda$ | I <sub>F</sub> = 10mA | —               | 20    | —    | nm         |
| Luminous Intensity Angle     | 2 $\phi$ 1/2     | I <sub>F</sub> = 20mA | —               | 30    |      | degre<br>e |
| Luminous Intensity           | I <sub>v</sub>   | I <sub>F</sub> = 20mA | -----           | ----- | 2200 | mcd        |

Remarks : 1. Luminous Intensity is measured by JF-II tester.  
2. All of the products are sensitive to static voltage. It is recommended that antistatic facilities like wrist band or antistatic gloves are used when handling the products.

Bin Code of luminous Intensity:

|                    | <b>Intensity Specification</b> |                |
|--------------------|--------------------------------|----------------|
| <b>Iv Bin Code</b> | <b>Iv (min)</b>                | <b>Iv(max)</b> |
| T                  | 1590                           | 2225           |
| U                  | 2225                           | 3115           |
| V                  | 3115                           | 4360           |

**Cautions on LED usage:**

1. Static Electricity and surge will damage the LEDs, It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
2. Use Grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
3. HHEC will not be held responsible for any damage caused by the operation exceeds the absolute maximum ratings.
4. Use the LEDs as soon as possible once the bag was opened. Store and use where there is no corrosive gas . The leads of LEDs will be rusty when the LEDs were exposed to the air for longer than one month.