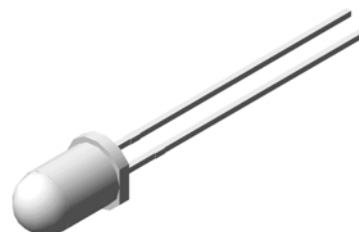


## 5mm Round Super Bright LED

### VT B648

#### Description

These series high brightness Yellow emitting LED are made from the most efficient AlGaInP technology. Its chip material is of AlGaInP technology, able to reach high light output efficiency. These series of LED come in moisture resistance water clear lens while offering 30 degree viewing angles. The most suitable for traffic light signal application. The wavelengths and luminous intensities of this series are grouped under 20mA for uniformity.




#### Applications

- Single or dual color graphic signs
- Message boards
- Variable message signs
- Commercial outdoor advertising
- Traffic light single



#### Electronic Optical Characteristics (at 20mA):

| Part Number | Emitted Color  | $\lambda$ (nm) |             | Lens Color | Iv(mcd) |      | View Angle (2 $\theta$ 1/2) | VF(V) |      |
|-------------|--|----------------|-------------|------------|---------|------|-----------------------------|-------|------|
|             |  | $\lambda_d$    | $\lambda_p$ |            | Min.    | Typ. |                             | Typ.  | Max. |
| VT B648     | Yellow  | 589            | 591         | Clear      | 3550    | 5600 | 30                          | 2.0   | 2.6  |

#### Absolute Maximum Ratings (at Ta=25°C)

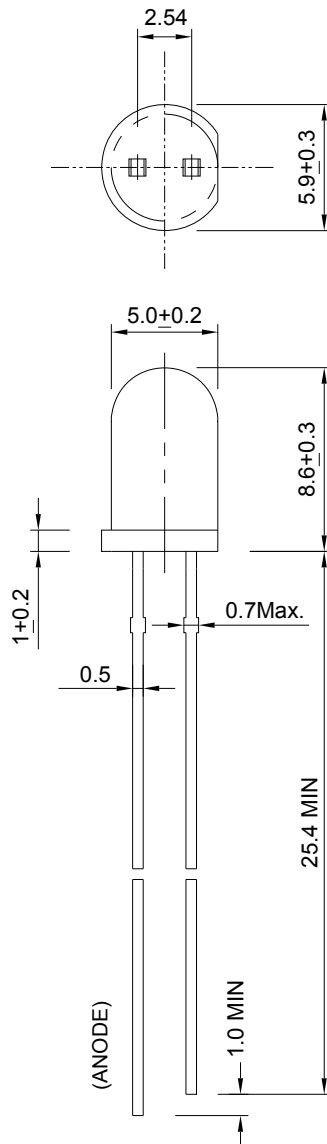
| P <sub>D</sub> (mW) | I <sub>F</sub> (mA) | I <sub>FP</sub> (mA) | ESD(V) | T <sub>sol</sub> (°C) | I <sub>R</sub> (uA)@V <sub>R</sub> =5V | T <sub>opr</sub> (°C) | T <sub>stg</sub> (°C) |
|---------------------|---------------------|----------------------|--------|-----------------------|--|-----------------------|-----------------------|
| 115                 | 30                  | 100                  | 2000   | 260±5 fro 5 sec       | 10                                     | -40~+85               | -40~+100              |

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life-span and may cause LED to fail.

\* I<sub>FP</sub>: Peak Forward Current under 1/10 duty, 1KHz condition

**Package Dimension:**

unit: mm

**Notes:**

1. All dimensions are millimeters.
2. Dimensional tolerance is  $\pm 0.2$  mm unless otherwise specified.
3. Epoxy meniscus under flange is 1.5 mm max.
4. Specifications are subject to change without notice.