Product No: MTSP-1360

## Peak Emission Wavelength: 525nm

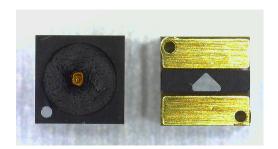
This 525nm RCLED is designed for applications requiring high accuracy and precision. It has a 50um aperture and is packaged in a 2.1mm x 2.1mm SMD black package.

#### **FEATURES**

- > 2.1mm squqre SMD Package
- > Dot Emitting Area: Ø 50um
- > Other configurations available on request

### **APPLICATIONS**

- > Rangefinder
- > Green Dot Scopes



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

| ITEMS                      | SYMBOL | RATINGS       | UNIT |
|----------------------------|--------|---------------|------|
| Continuous Forward Current | If     | 7             | mA   |
| Continous Reverse Voltage  | Vr     | 5V (@10uA)    | V    |
| Storage Temperature        | Tstg   | -40 to 100    | °C   |
| Operating Temperature      | Topr   | -20 to 85     | °C   |
| Lead Solder Temperature    | Tls    | 260 °C, 5 sec |      |

# Electrical & Optical Characteristics (Ta = 25°C)

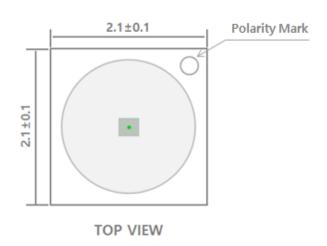
| ITEMS               | SYMBOL | CONDITIONS | MIN | TYP  | MAX | UNIT |
|---------------------|--------|------------|-----|------|-----|------|
| Total Radiant Flux  | Фо     | If=5mA     |     | 100  |     | uW   |
| Peak Wavelength     | λр     | If=2mA     |     | 520  | 540 | nm   |
| Forward Voltage     | Vf     | If=2mA     |     | 2.8  |     | V    |
| Operating Voltage   | Vop    | If=50uA    |     | 2.15 |     | V    |
| Operating Current** | If     |            | 10  |      | 100 | uA   |
| Breakdown Voltage   | Vb     |            |     | -10  |     | V    |

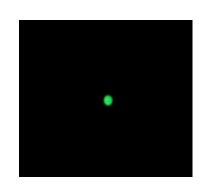
<sup>\*\*</sup> The applied current can be changed according to the user environment.

Note: Care is required during assembly and when handling the component so as to not damage the surface of the LED. This may affect the appearance and optical performance.

2023-01-03

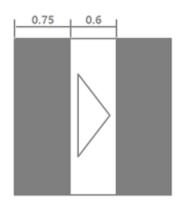
Product No: MTSP-1360







SIDE VIEW



**BOTTOM VIEW** 





The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

DANGER

The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.

2023-01-03





Product No: MTSP-1360

### Caution: This bag Contains MOISTURE SENSITIVE DEVICES LEVEL 5A

- 1 Calculated shelf life in sealed bag: 12 months at < 40 °C and < 90% humidity</p>
- 2 Peak Package Temperature: 80°C
- After bag is opened, devices that will be subjected to reflow solder or other high temperature processes must be (a) mounted within 24 hours of factory conditions ≤30°C/60% (b) Stored at <10% RH
- 4 Devices require bake before mounting if humidity indicator card is >10% and/or conditions 3a or 3b are not met.
- 5 Recommended baking: 70°C for 24 hours
- 6 Caution when handling the component. Do not touch the surface or expose to dust, particulates or other forms of contamination.Surface is easily scratched, marred or damaged which can affect the appearance and optical performance.
- 7 If cleaning is required, do not use harsh or unspecified chemicals. DI water or isopropyl alcohol is recommended. Please allow to dry at room temperature for 15 minutes before use. Extreme care when cleaning is required so as not to damage the LED surface.

#### Caution: Handling this product

- 1 Caution when handling the component. Do not touch the surface or expose to dust, particulates or other forms of contamination. Surface is easily scratched, marred or damaged which can affect the appearance and optical performance.
- 2 If cleaning is required, do not use harsh or unspecified chemicals. DI water or isopropyl alcohol is recommended. Please allow to dry at room temperature for 15 minutes before use. Extreme care when cleaning is required so as not to damage the LED surface.