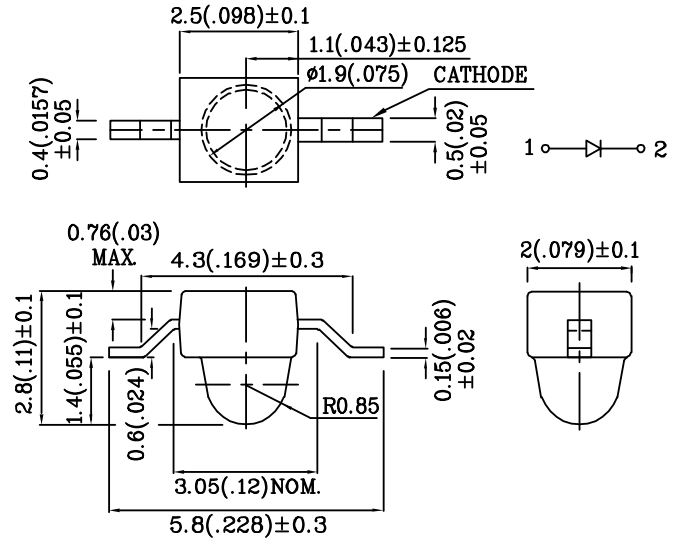




### Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- Z-BEND LEAD.
- LONG LIFE-SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- PACKAGE : 1000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



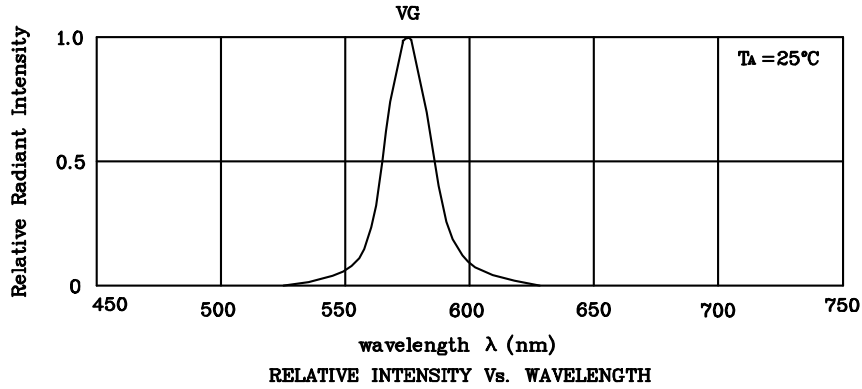
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.

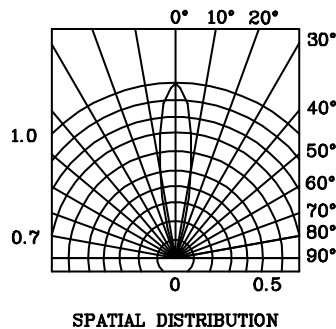
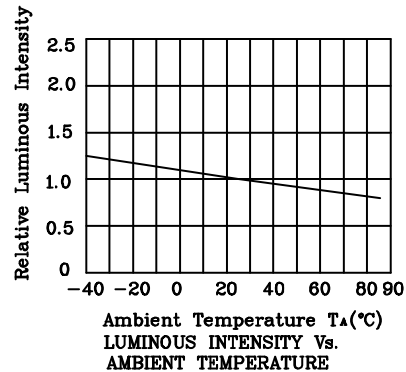
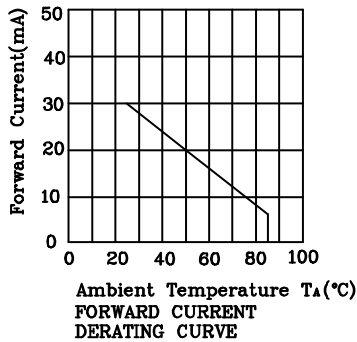
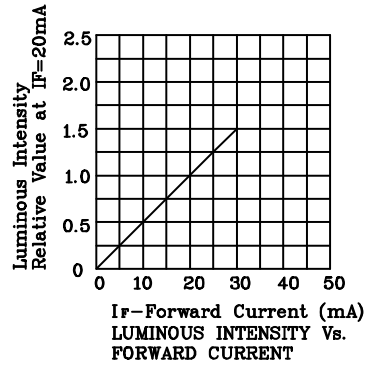
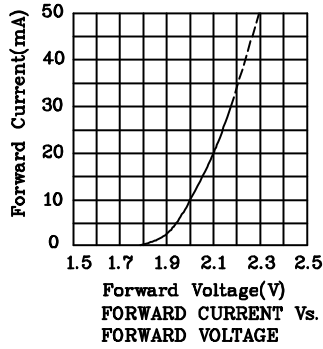
| Absolute Maximum Ratings<br>( $T_A=25^\circ\text{C}$ )         |           | VG<br>(InGaAlP) | Unit |
|--|-----------|-----------------|------|
| Reverse Voltage  | $V_R$     | 5               | V    |
| Forward Current  | $I_F$     | 30              | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | $i_{FS}$  | 150             | mA   |
| Power Dissipation  | $P_T$     | 105             | mW   |
| Operating Temperature  | $T_A$     | -40 ~ +85       | °C   |
| Storage Temperature  | $T_{stg}$ | -40 ~ +85       |      |

| Operating Characteristics<br>( $T_A=25^\circ\text{C}$ )                     |                 | VG<br>(InGaAlP) | Unit          |
|---|-----------------|-----------------|---------------|
| Forward Voltage (Typ.)<br>( $I_F=20\text{mA}$ )                             | $V_F$           | 2.1             | V             |
| Forward Voltage (Max.)<br>( $I_F=20\text{mA}$ )                             | $V_F$           | 2.5             | V             |
| Reverse Current (Max.)<br>( $V_R=5\text{V}$ )                               | $I_R$           | 10              | $\mu\text{A}$ |
| Wavelength of Peak<br>Emission (Typ.)<br>( $I_F=20\text{mA}$ )              | $\lambda_p$     | 574             | nm            |
| Wavelength of Dominant<br>Emission (Typ.)<br>( $I_F=20\text{mA}$ )          | $\lambda_D$     | 570             | nm            |
| Spectral Line Full Width At<br>Half-Maximum (Typ.)<br>( $I_F=20\text{mA}$ ) | $\Delta\lambda$ | 20              | nm            |
| Capacitance<br>( $V_F=0\text{V}$ , $f=1\text{MHz}$ )                        | $C$             | 15              | pF            |

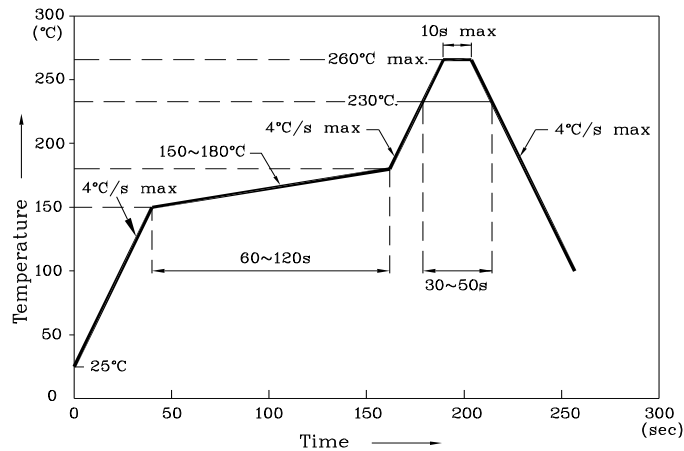
| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Lens-color  | Luminous<br>Intensity<br>( $I_F=20\text{mA}$ )<br>mcd |      | Wavelength<br>nm<br>$\lambda_P$ | Viewing<br>Angle<br>$2\theta$ 1/2 |
|----------------|-------------------|----------------------|-------------|---|------|---------------------------------|-----------------------------------|
|                |                   |                      |             | min.  | typ. |                                 |                                   |
| ZVG46W-9       | Green             | InGaAlP              | Water Clear | 110   | 397  | 574                             | 20°                               |



❖ VG



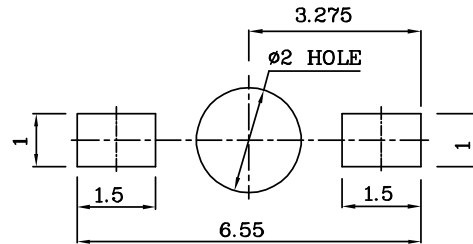
Reflow Soldering Profile For Lead-free SMT Process.



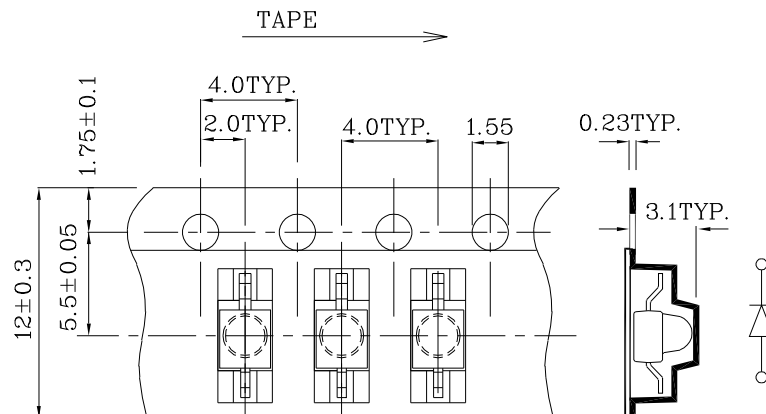
Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units: mm ; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.