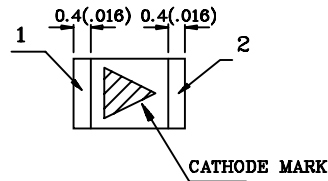
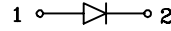
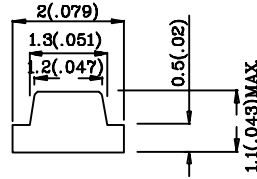
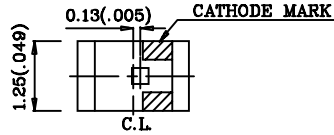


## 2.0x1.2mm SMD CHIP LED LAMP



# SUN LED

ZAG54W



Notes:

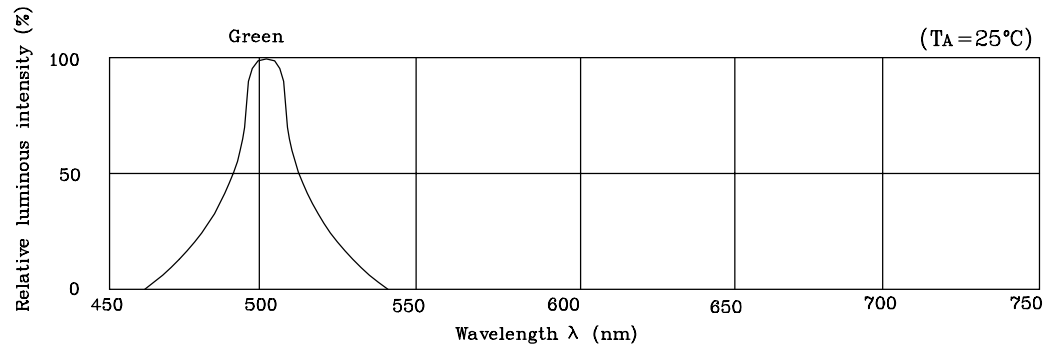
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.

| Absolute maximum ratings<br>( $T_A=25^\circ\text{C}$ )        |           | AG<br>(InGaN) | Unit             |
|---------------------------------------------------------------|-----------|---------------|------------------|
| Reverse voltage                                               | $V_R$     | 5             | V                |
| Forward current                                               | $I_F$     | 30            | mA               |
| Forward current (peak)<br>1/10Duty cycle<br>0.1ms pulse width | $i_{FS}$  | 100           | mA               |
| Power dissipation                                             | $P_T$     | 135           | mW               |
| Operation temperature                                         | $T_A$     | -20 ~ +80     | $^\circ\text{C}$ |
| Storage temperature                                           | $T_{stg}$ | -30 ~ +85     |                  |

| Operating Characteristics<br>( $T_A=25^\circ\text{C}$ ) |                  | AG<br>(InGaN) | Unit          |
|---------------------------------------------------------|------------------|---------------|---------------|
| Forward voltage (typ.)<br>( $I_F=20\text{mA}$ )         | $V_F$            | 3.5           | V             |
| Forward voltage (max.)<br>( $I_F=20\text{mA}$ )         | $V_F$            | 4.0           | V             |
| Reverse current<br>( $V_R=5\text{V}$ )                  | $I_R$            | 10            | $\mu\text{A}$ |
| Wavelength at peak<br>emission<br>( $I_F=20\text{mA}$ ) | $\lambda_{peak}$ | 502           | nm            |
| Spectral Line half-width<br>( $I_F=20\text{mA}$ )       | $\Delta\lambda$  | 30            | nm            |
| Capacitance<br>( $V_F=0$ , $f=1\text{MHz}$ )            | C                | 90            | pF            |

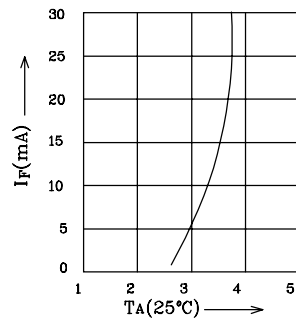
| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Lens-color  | Luminous<br>Intensity<br>( $I_F=20\text{mA}$ )<br>mcd |      | Wavelength<br>nm | Viewing<br>Angle |
|----------------|-------------------|----------------------|-------------|-------------------------------------------------------|------|------------------|------------------|
|                |                   |                      |             | min.                                                  | typ. |                  |                  |
| ZAG54W         | green             | InGaN                | water clear | 40                                                    | 75   | 502              | 120°             |

**ZAG54W**

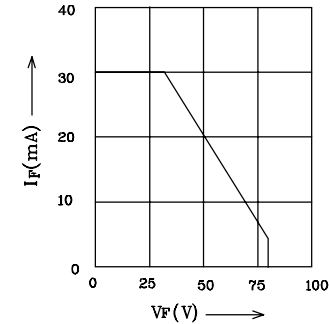


❖AG

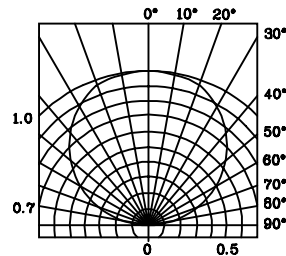
Forward current derating curve



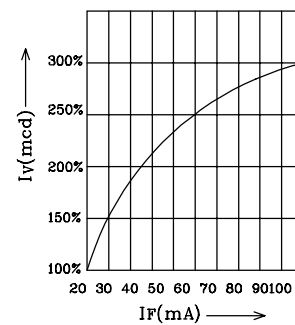
Forward current Vs. Forward voltage



Radiation Characteristics

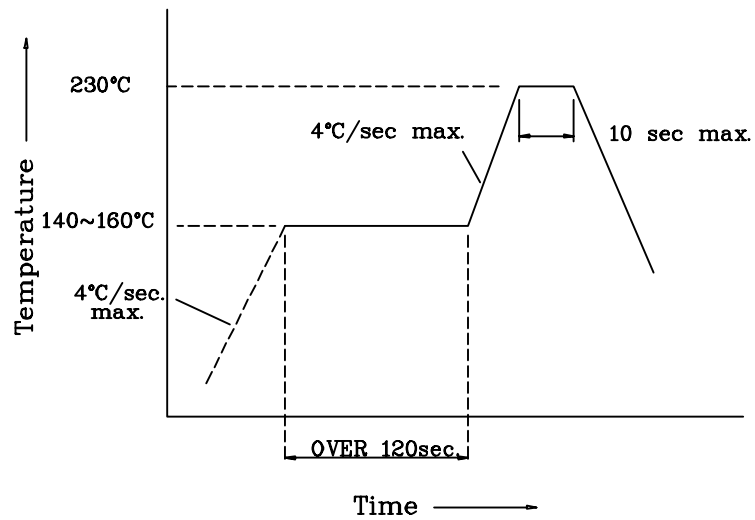


Luminous Intensity Vs. Forward Current

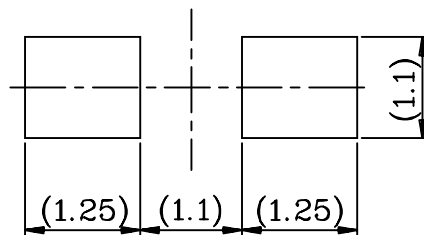


## ZAG54W

### ❖ SMT Reflow Soldering Instructions



### ❖ Recommended Soldering Pattern (Units : mm)



# ZAG54W

## ❖ Tape Specification (Units : mm)

