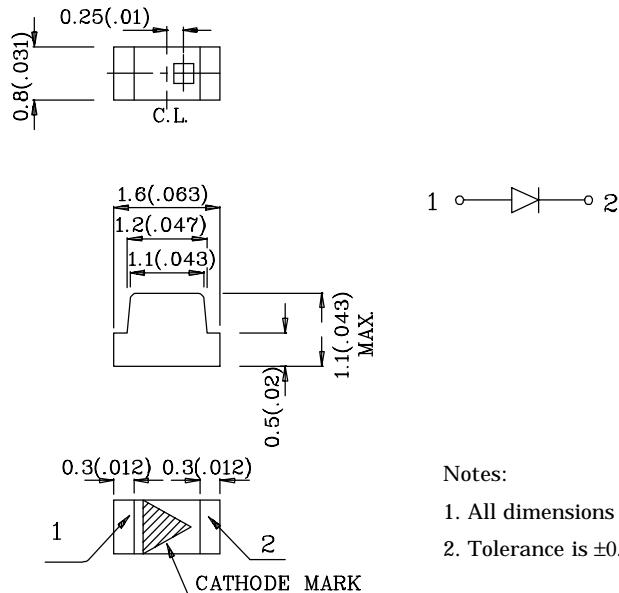


# 1.6x0.8mm SMD CHIP LED LAMP



# SUN LED

ZMO53W



#### Notes:

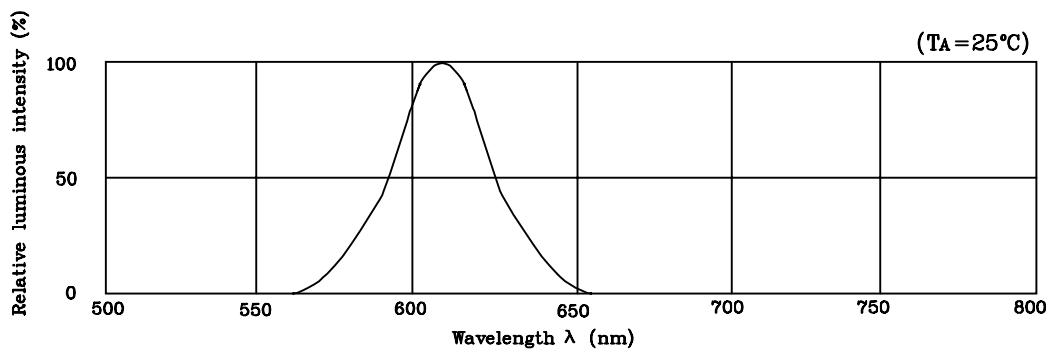
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.

| Absolute maximum ratings<br>( $T_A=25^\circ\text{C}$ )        |          | MO<br>(InGaAlP) | 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 | $i_{FS}$ | 150             | mA               |
| Power dissipation   | $P_T$    | 75              | mW               |
| Operation temperature   | $T_A$    | -40 ~ +85       | $^\circ\text{C}$ |
| Storage temperature   | Tstg     |                 |                  |

| Operating Characteristics<br>( $T_A=25^\circ\text{C}$ ) |                  | MO<br>(InGaAlP) | Unit |
|---|------------------|-----------------|------|
| Forward voltage (typ.)<br>( $IF=20\text{mA}$ )          | $V_F$            | 1.95            | V    |
| Forward voltage (max.)<br>( $IF=20\text{mA}$ )          | $V_F$            | 2.5             | V    |
| Reverse current<br>( $VR=5\text{V}$ )                   | $I_R$            | 10              | uA   |
| Wavelength at peak<br>emission<br>( $IF=20\text{mA}$ )  | $\lambda_{peak}$ | 610             | nm   |
| Spectral Line half-width<br>( $IF=20\text{mA}$ )        | $\Delta\lambda$  | 15              | nm   |
| Capacitance<br>( $VF=0$ , $f=1\text{MHz}$ )             | C                | 40              | pF   |

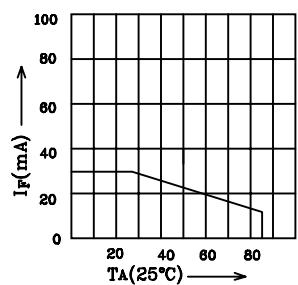
| Part Number | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>( $IF=20\text{mA}$ )<br>mcd | Wavelength nm | Viewing Angle |
|-------------|----------------|-------------------|-------------|---|---------------|---------------|
|             |                |                   |             | min.  | typ.          |               |
| ZMO53W      | orange         | InGaAlP           | water clear | 80  | 200           | 610           |
|             |                |                   |             |   |               | 120°          |

## ZMO53W

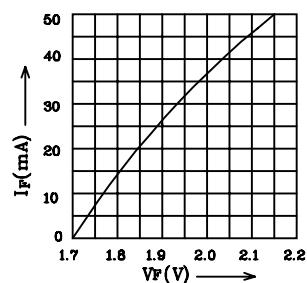


## ❖MO

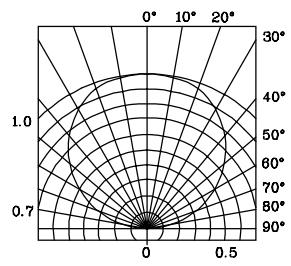
Forward current derating curve



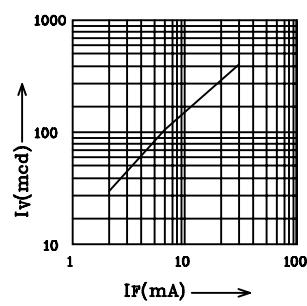
Forward Current Vs.  
Forward Voltage



Radiation Characteristics

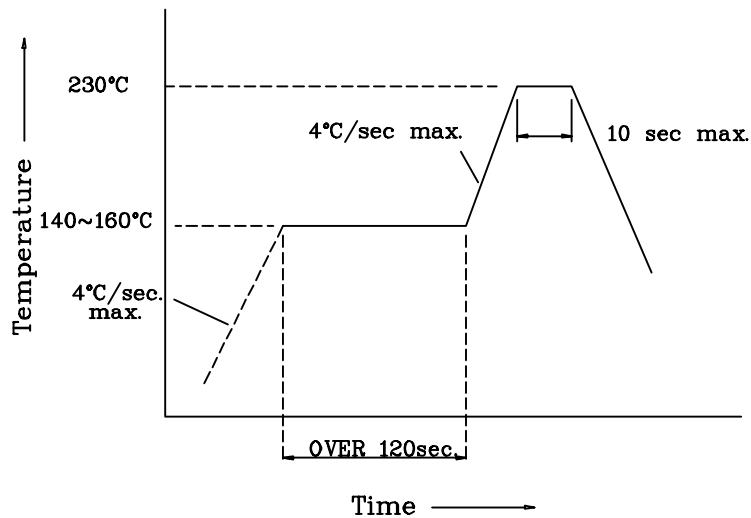


Luminous Intensity Vs.  
Forward Current

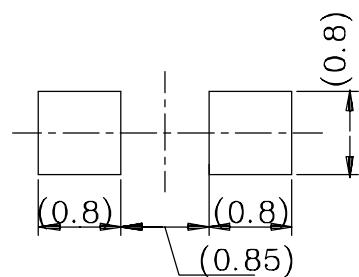


**ZMO53W**

❖ **SMT Reflow Soldering Instructions**



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



**ZMO53W**

❖Tape Specification (Units : mm)

