

### 3.0x2.5mm SURFACE MOUNT LED LAMP

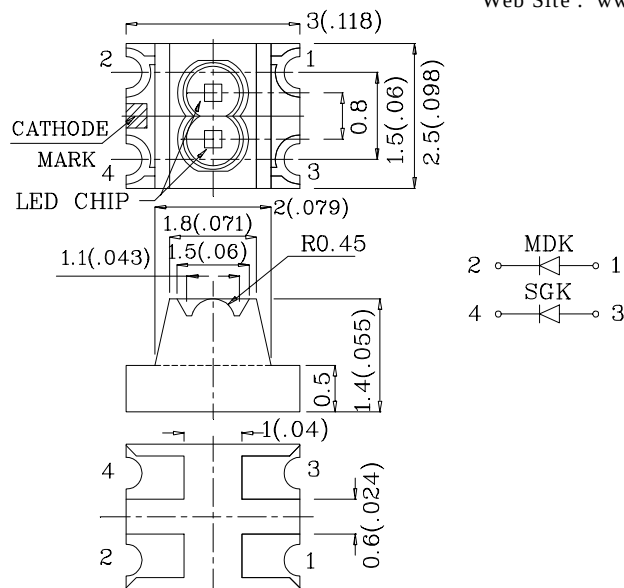
XZMDKSGK57W-1



# SUN LED

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#### Notes:

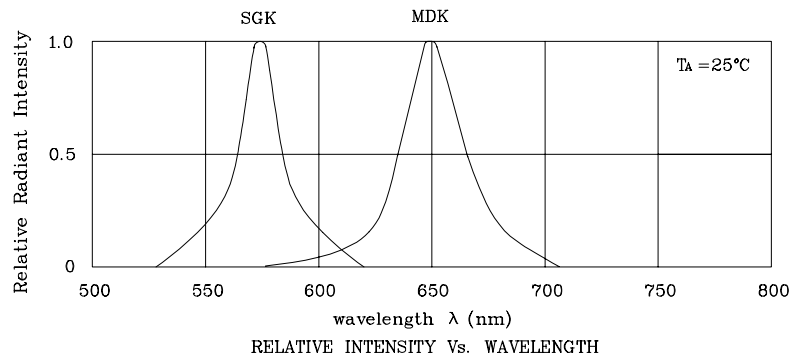
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.0079)$  unless otherwise noted.

| Absolute maximum ratings<br>( $T_A=25^{\circ}\text{C}$ )      |           | MDK<br>(InGaAlP) | SGK<br>(InGaAlP) | Unit               |
|---------------------------------------------------------------|-----------|------------------|------------------|--------------------|
| Reverse voltage                                               | $V_R$     | 5                | 5                | V                  |
| Forward current                                               | $I_F$     | 30               | 30               | mA                 |
| Forward current (peak)<br>1/10Duty cycle<br>0.1ms pulse width | $i_{FS}$  | 185              | 150              | mA                 |
| Power dissipation                                             | $P_T$     | 170              | 105              | mW                 |
| Operating temperature                                         | $T_A$     | $-40 \sim +85$   | $-40 \sim +85$   | $^{\circ}\text{C}$ |
| Storage temperature                                           | $T_{stg}$ | $-40 \sim +85$   | $-40 \sim +85$   |                    |

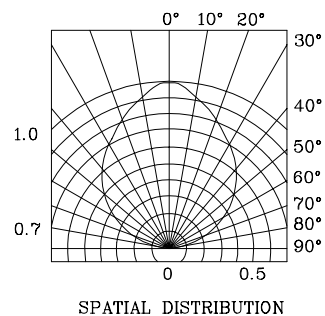
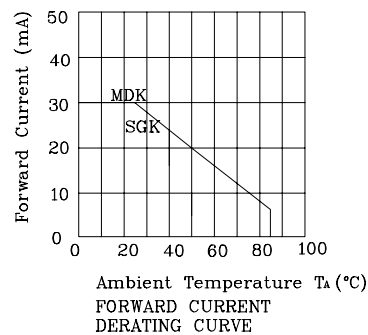
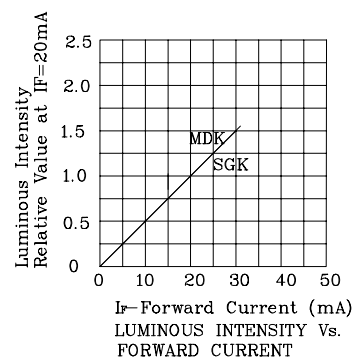
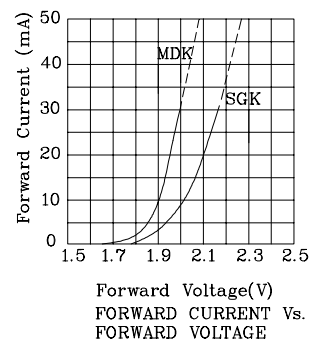
| Operating Characteristics<br>( $T_A=25^{\circ}\text{C}$ )   |                  | MDK<br>(InGaAlP) | SGK<br>(InGaAlP) | Unit          |
|-------------------------------------------------------------|------------------|------------------|------------------|---------------|
| Forward voltage (typ.)<br>( $I_F=20\text{mA}$ )             | $V_F$            | 1.95             | 2.1              | V             |
| Forward voltage (max.)<br>( $I_F=20\text{mA}$ )             | $V_F$            | 2.5              | 2.5              | V             |
| Reverse current<br>( $V_R=5\text{V}$ )                      | $I_R$            | 10               | 10               | $\mu\text{A}$ |
| Wavelength at peak<br>emission<br>( $I_F=20\text{mA}$ )     | $\lambda_{peak}$ | 650              | 574              | nm            |
| Wavelength at Dominate<br>emission<br>( $I_F=20\text{mA}$ ) | $\lambda_D$      | 635              | 570              | nm            |
| Spectral Line half-width<br>( $I_F=20\text{mA}$ )           | $\Delta\lambda$  | 28               | 20               | nm            |
| Capacitance<br>( $V_F=0\text{V}$ , $f=1\text{MHz}$ )        | $C$              | 35               | 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. |                                 |                                     |
| XZMDKSGK57W-1  | Red               | InGaAlP              | Water Clear | 110                                                   | 299  | 650                             | 100°                                |
|                | Green             | InGaAlP              |             | 50                                                    | 89   | 574                             |                                     |

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❖MDK/SGK



## ❖ SMT Reflow Soldering Instructions

