

PRELIMINARY SPEC

KPED-3528EC

HIGH EFFICIENCY RED

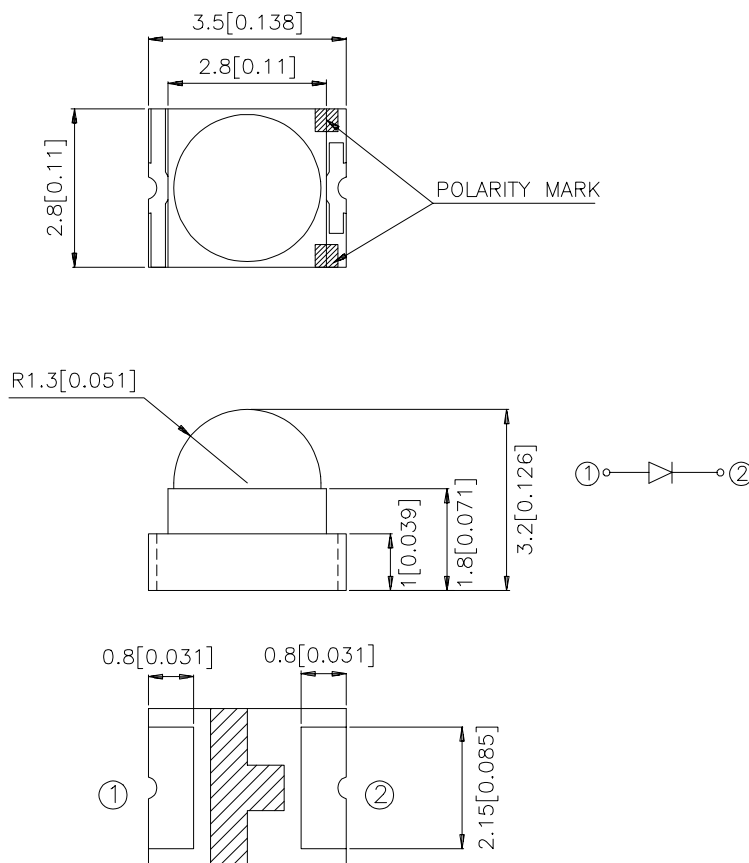
### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- IDEAL FOR BACKLIGHTING.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE : 500PCS / REEL.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.0079") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.    | Dice                              | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|-------------|-----------------------------------|-------------|---------------------|------|------------------|
|             |                                   |             | Min.                | Typ. | θ1/2             |
| KPED-3528EC | HIGH EFFICIENCY RED (GaAsP/ GaP ) | WATER CLEAR | 18                  | 50   | 40°              |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

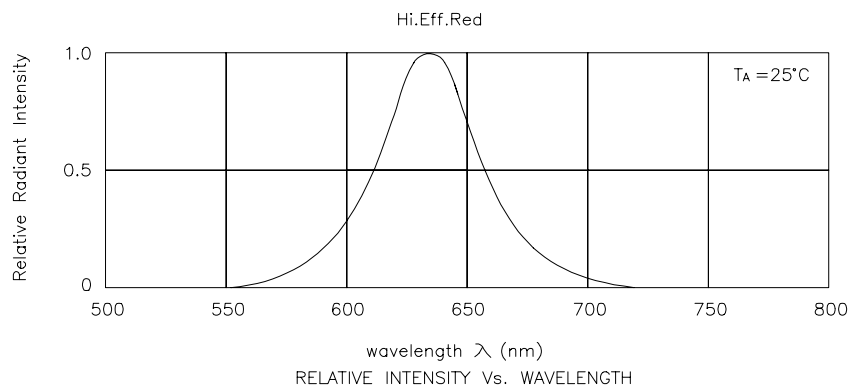
| Symbol            | Parameter                | Device              | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub>    | Dominate Wavelength      | High Efficiency Red | 625  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | I <sub>F</sub> =20mA      |
| C                 | Capacitance              | High Efficiency Red | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>    | Reverse Current          | High Efficiency Red |      | 10   | μA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 105                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

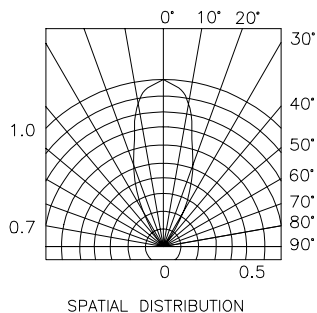
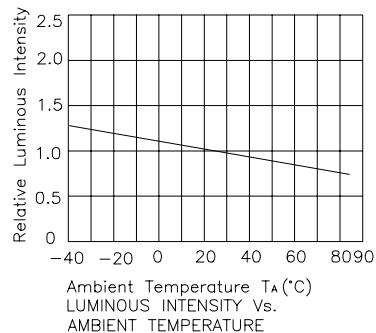
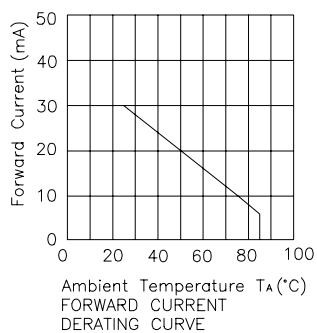
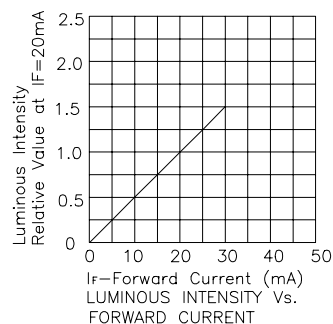
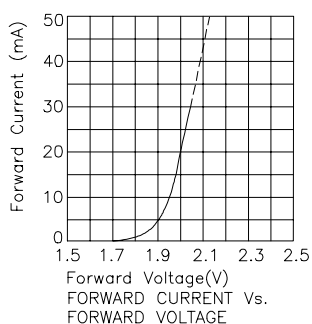
Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



## High Efficiency Red

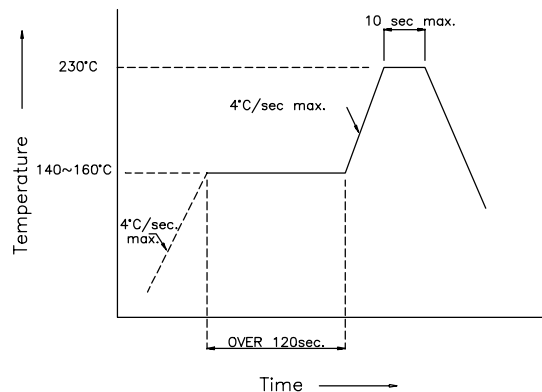
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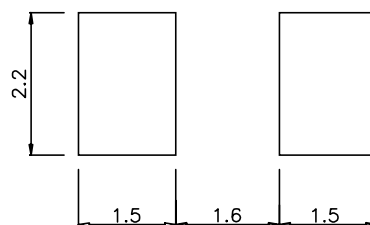
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### SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

