

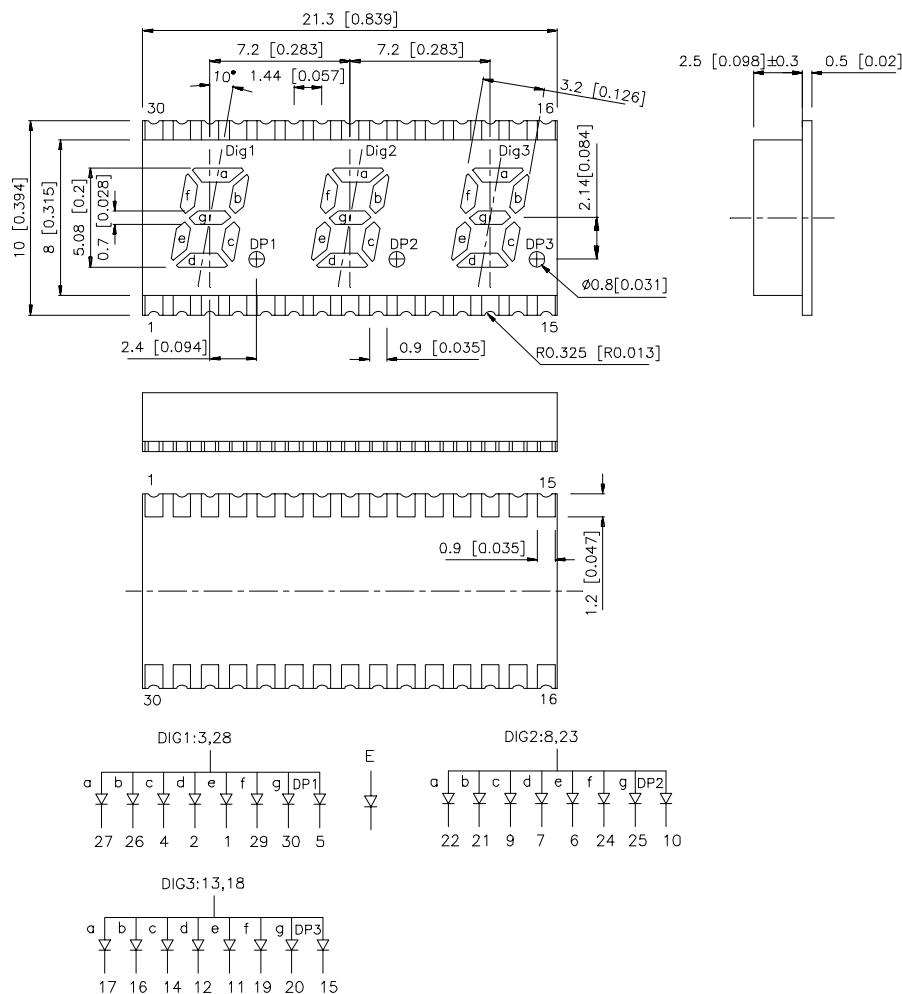
### Features

- 0.2INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE:1000PCS/REEL

### Description

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

### Package Dimensions& Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters (inches). Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Selection Guide

| Part No.   | Dice                           | Lens Type      | Iv (ucd)<br>@ 10 mA |      | Description                      |
|------------|--------------------------------|----------------|---------------------|------|----------------------------------|
|            |                                |                | Min.                | Typ. |                                  |
| KPBA02-101 | HIGH EFFICIENCY RED(GaAsP/GaP) | WHITE DIFFUSED | 1200                | 5800 | Common Anode.<br>Rt.Hand Decimal |

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

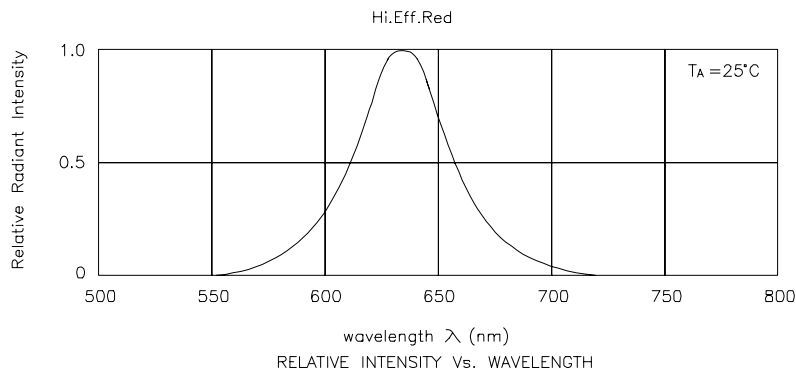
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions           |
|-----------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$           | Dominate Wavelength      | High Efficiency Red | 625  |      | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | 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   | uA    | V <sub>R</sub> = 5V       |

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

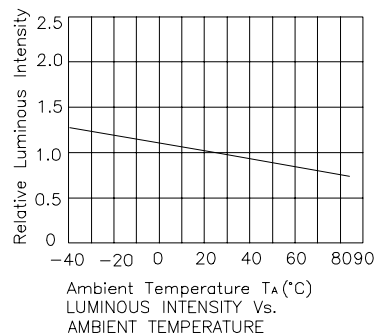
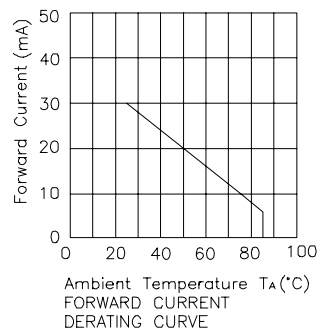
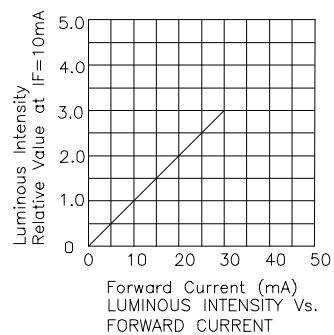
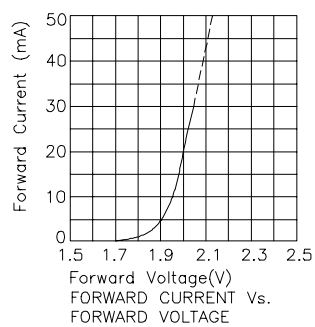
| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 105                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160       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

Note:

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

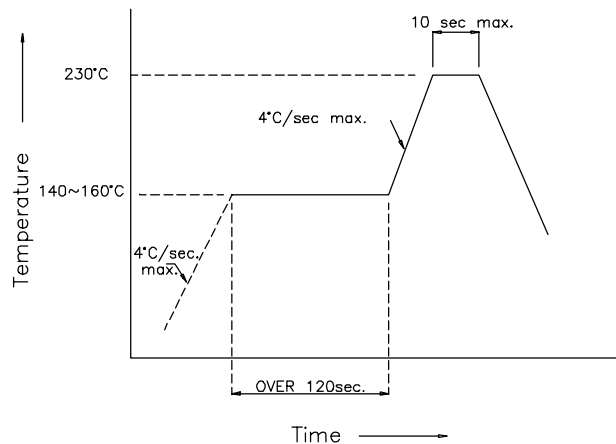


## High Efficiency Red KPBA02-101

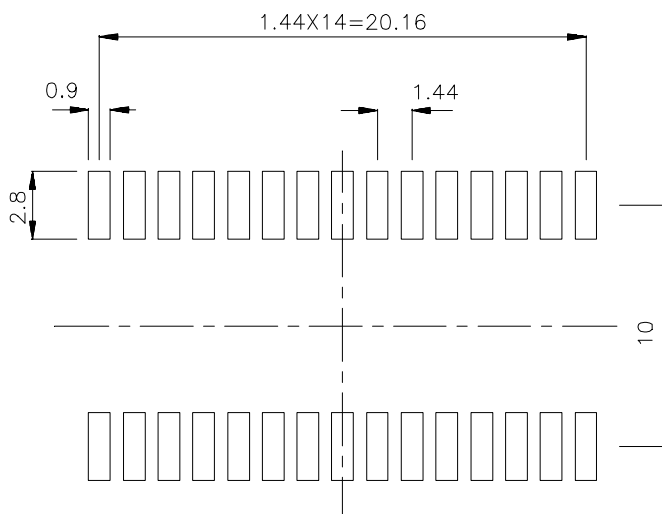


## KPBA02-101 SMT Reflow Soldering Instruction

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 Specification  
(Units : mm)

