

KA-3020EC HIGH EFFICIENCY RED

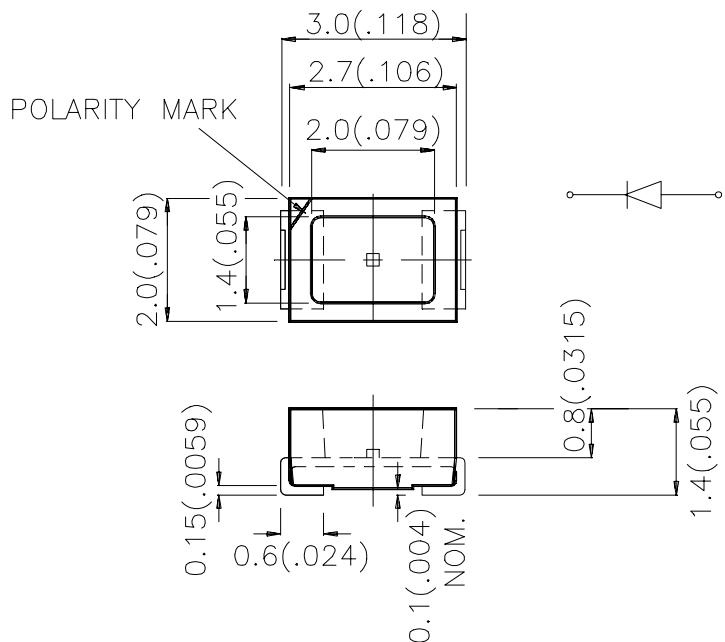
Features

- 3.0mm X 2.0mm, 1.4mm HIGH, ONLY MINIMUM SPACE REQUIRED.
- SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- LOW POWER CONSUMPTION.
- PACKAGE : 2000PCS / 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 $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | I _V (mcd) @ 20 mA | | Viewing Angle |
|-----------|--------------------------------|-------------|---------------------------------|------|------------------|
| | | | Min. | Typ. | |
| KA-3020EC | HIGH EFFICIENCY RED(GaAsP/GaP) | WATER CLEAR | 7 | 20 | 90° |

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_A=25°C

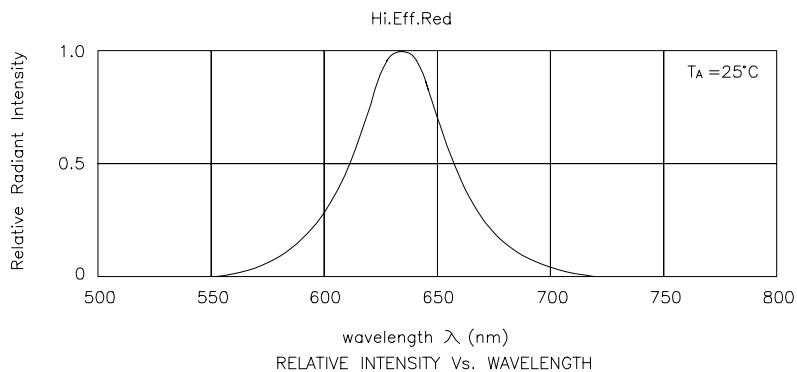
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | High Efficiency Red | 627 | | nm | I _F =20mA |
| λ D | Dominate Wavelength | High Efficiency Red | 625 | | nm | I _F =20mA |
| Δλ1/2 | Spectral Line Half-width | High Efficiency Red | 45 | | nm | I _F =20mA |
| C | Capacitance | High Efficiency Red | 15 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | High Efficiency Red | 2.0 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | High Efficiency Red | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at T_A=25°C

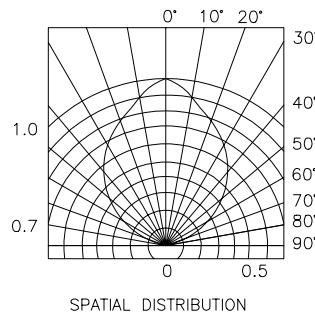
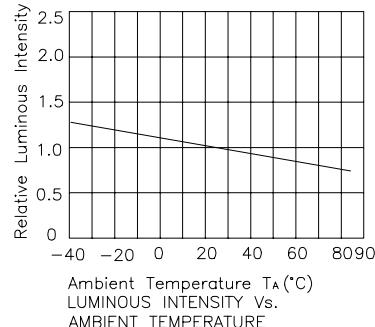
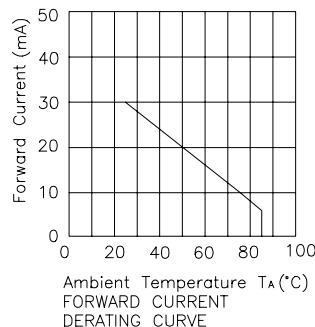
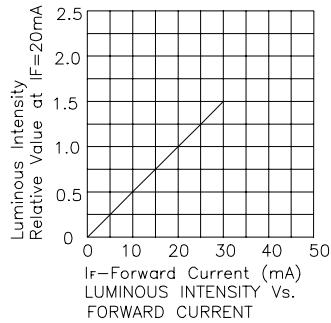
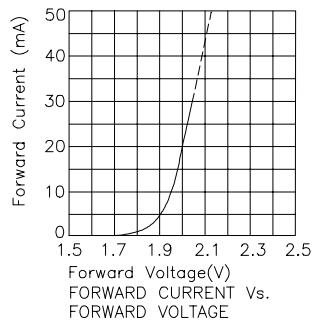
| Parameter | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 105 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

Note:

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

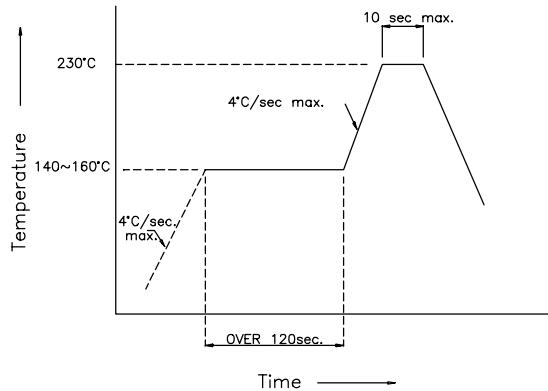


High Efficiency Red KA-3020EC

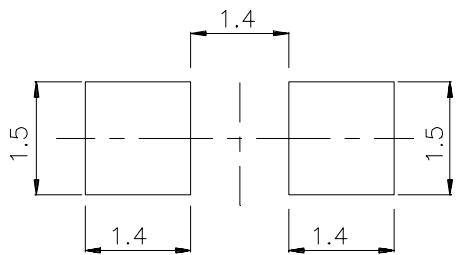


KA-3020EC SMT Reflow Soldering Instruction

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 Specifications (Units : mm)

