

KPTD-3216EC HIGH EFFICIENCY RED
 KPTD-3216SGC SUPER BRIGHT GREEN
 KPTD-3216YC YELLOW

Features

- 3.2mm x 1.6mm SMT LED, 1.8mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

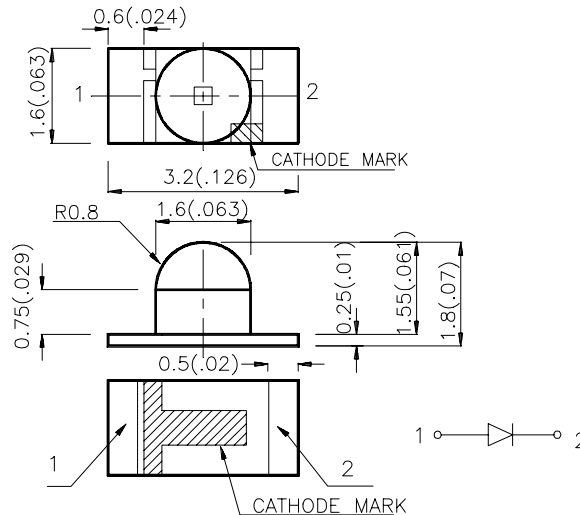
Description

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

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.0079") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|--------------|--------------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | |
| KPTD-3216EC | HIGH EFFICIENCY RED(GaAsP/GaP) | WATER CLEAR | 10 | 50 | 40° |
| KPTD-3216SGC | SUPER BRIGHT GREEN (GaP) | WATER CLEAR | 5 | 20 | 40° |
| KPTD-3216YC | YELLOW (GaAsP/GaP) | WATER CLEAR | 3 | 30 | 40° |

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

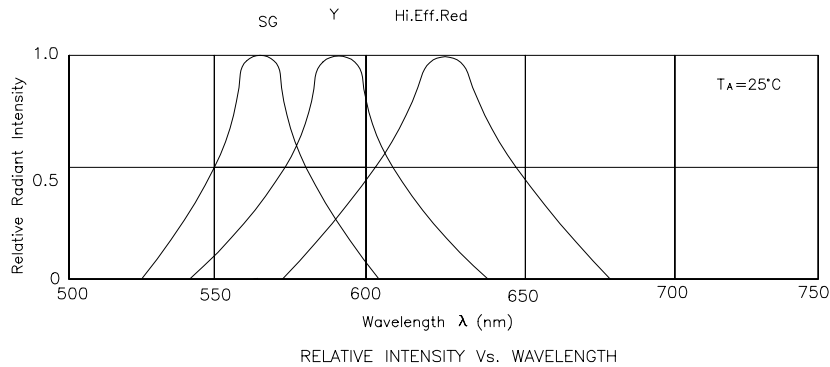
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------------|-------------------------|---|-------------------|-------------------|---------------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Super Bright Green Yellow | 627 565 590 | | nm | IF=20mA |
| λ_D | Dominate Wavelength | High Efficiency Red Super Bright Green Yellow | 625 568 588 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | High Efficiency Red Super Bright Green Yellow | 45 30 35 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Super Bright Green Yellow | 15 15 20 | | pF | VF=0V;f=1MHz |
| V_F | Forward Voltage | High Efficiency Red Super Bright Green Yellow | 2.0 2.2 2.1 | 2.5 2.5 2.5 | V | IF=20mA |
| I_R | Reverse Current | High Efficiency Red Super Bright Green Yellow | | 10 | μA | VR = 5V |

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

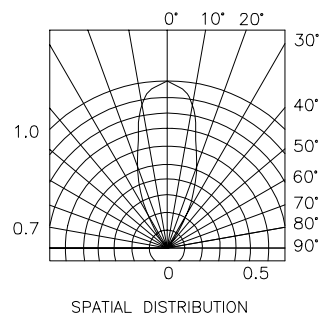
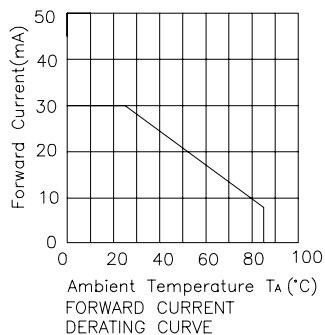
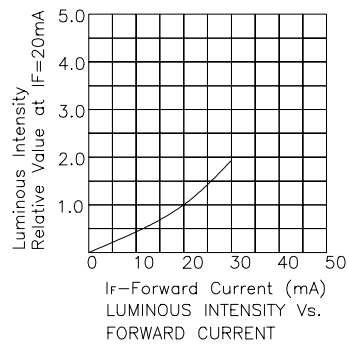
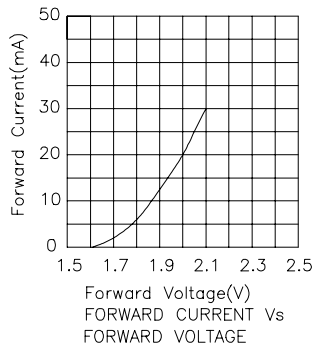
| Parameter | High Efficiency red | Super Bright Green | Yellow | Units |
|--------------------------|---------------------|--------------------|--------|-------|
| Power dissipation | 105 | 105 | 105 | mW |
| DC Forward Current | 30 | 25 | 30 | mA |
| Peak Forward Current [1] | 160 | 140 | 140 | mA |
| Reverse Voltage | 5 | 5 | 5 | V |
| Operating Temperature | -40°C To +85°C | | | |
| Storage Temperature | -40°C To +85°C | | | |

Note:

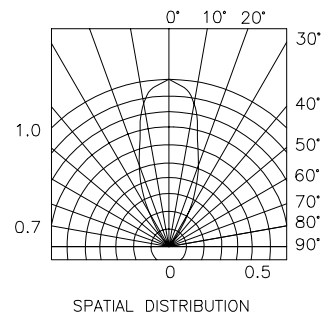
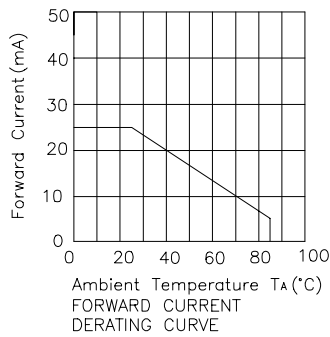
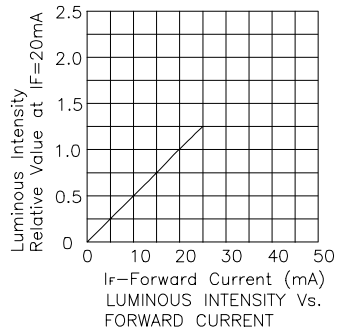
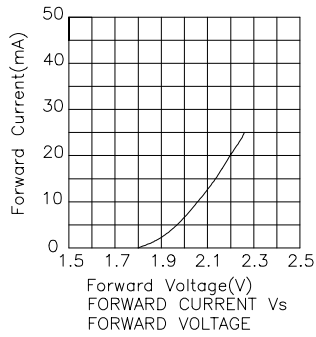
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



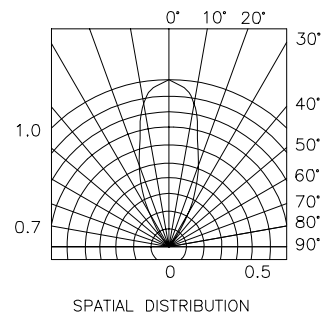
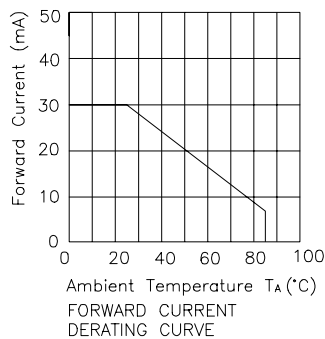
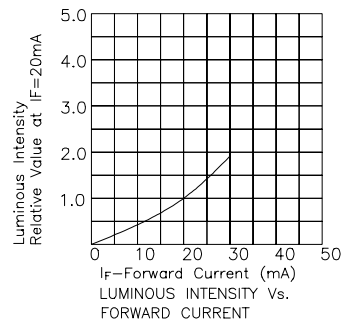
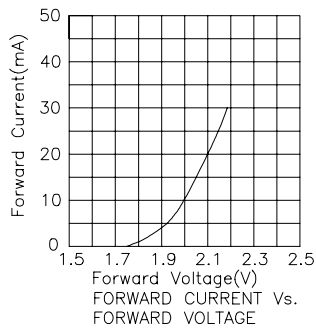
High Efficiency Red KPTD-3216EC



Super Bright Green KPTD-3216SGC

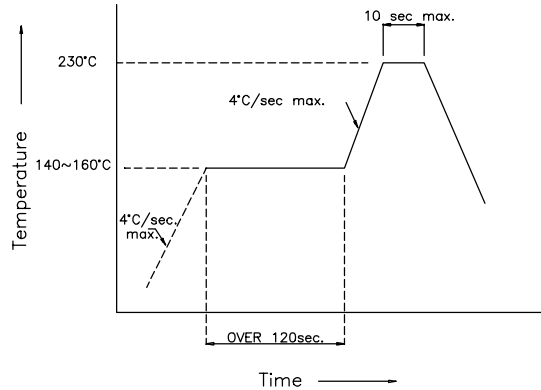


Yellow KPTD-3216YC

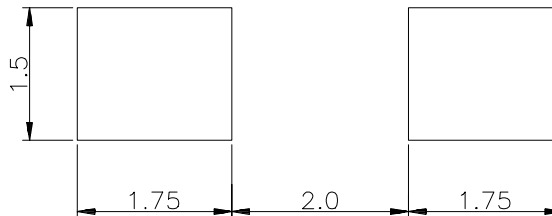


KPTD-3216 SMT Reflow Soldering Instructions

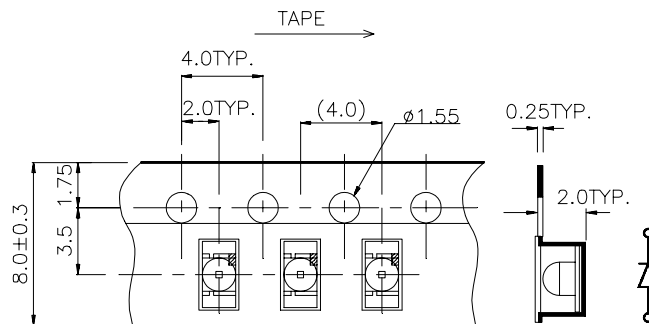
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)



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