

| Order code | Manufacturer code | Description |
|-------------------|--------------------------|--|
| 72-9604 | n/a | KPT-3216SURCK RL2000 LED 1206 RED (RC) |

| | |
|--|---|
| The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E. | Page 1 of 5 Revision A 12/12/2006 |
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KPT-3216SURCK

HYPER RED

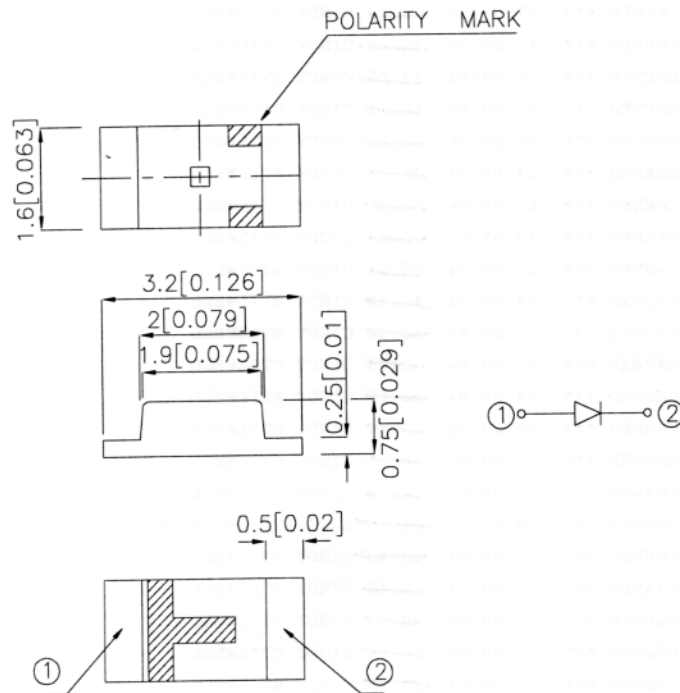
Features

- 3.2mmx1.6mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

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

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|---------------|---------------------|-------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| KPT-3216SURCK | HYPER RED (InGaAlP) | WATER CLEAR | 50 | 150 | 120° |

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 TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|-----------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Hyper Red | 650 | | nm | I _F =20mA |
| λ_D | Dominant Wavelength | Hyper Red | 635 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Hyper Red | 28 | | nm | I _F =20mA |
| C | Capacitance | Hyper Red | 35 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Hyper Red | 1.95 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Hyper Red | | 10 | μA | V _R = 5V |

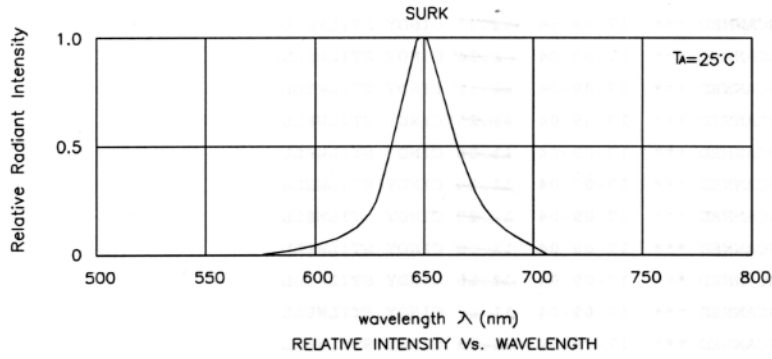
Absolute Maximum Ratings at TA=25°C

| Parameter | Hyper Red | Units |
|---------------------------------|----------------|-------|
| Power dissipation | 170 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 185 | mA |
| Reverse Voltage | 5 | V |
| Operating / storage Temperature | -40°C To +85°C | |

Note:

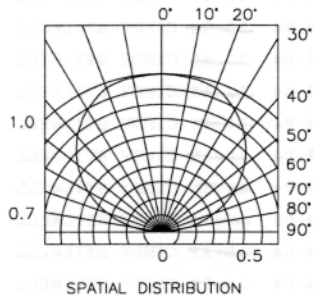
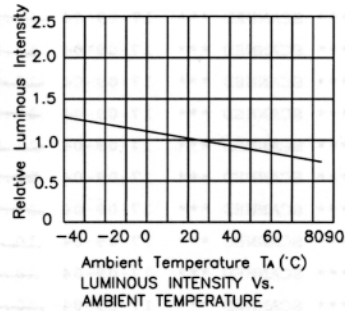
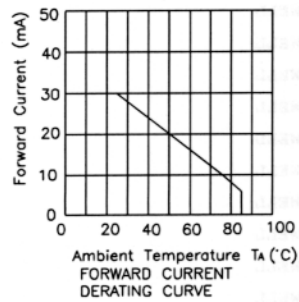
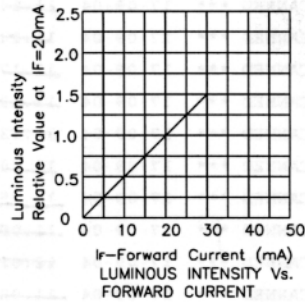
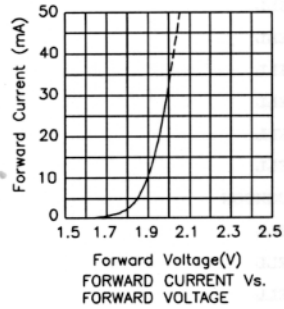
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

Kingbright



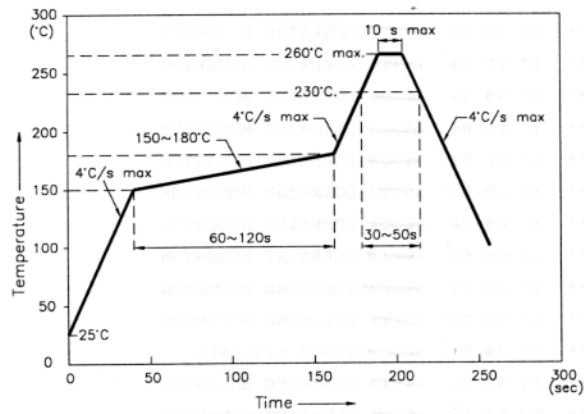
Hyper Red

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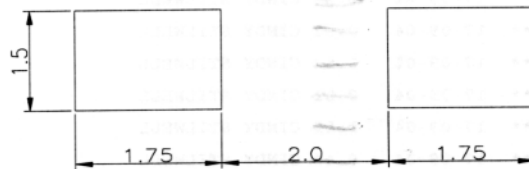
Reflow Soldering Profile For Lead-free SMT Process.



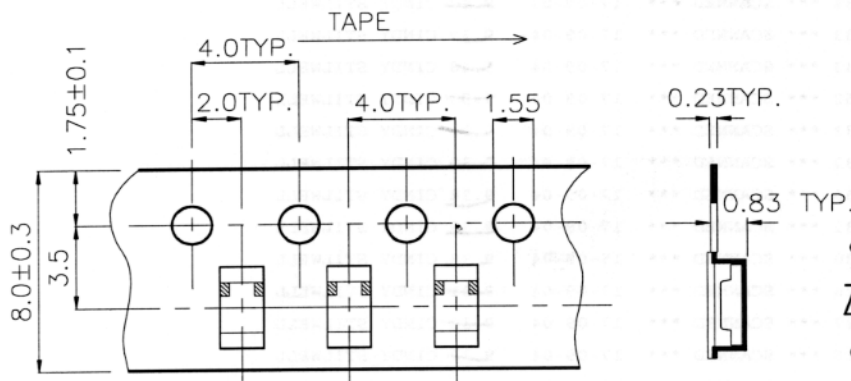
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.