

Part Number: KPH-1608YC

Yellow

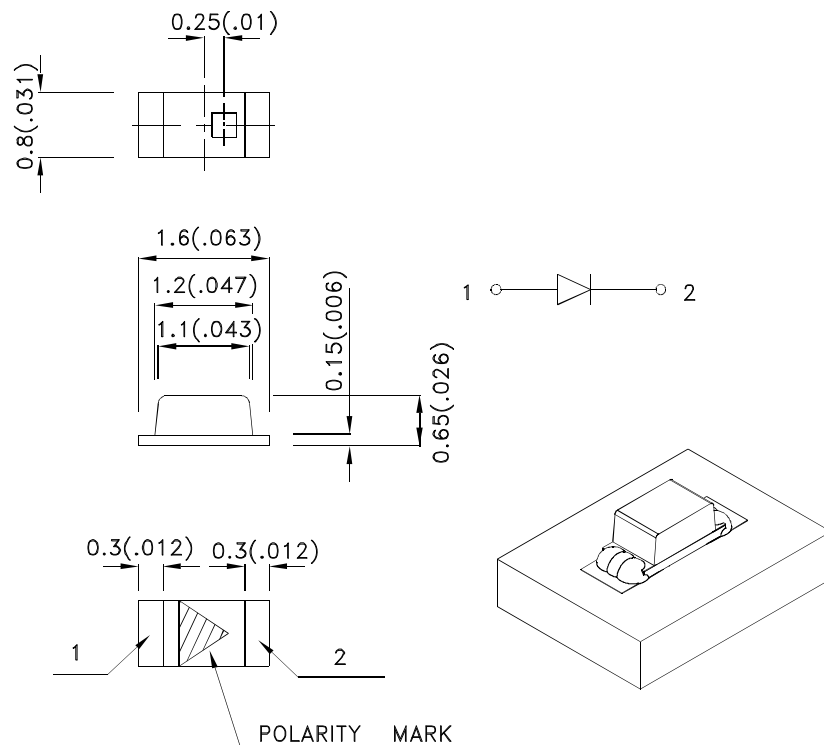
Features

- 1.6mmX0.8mm SMT LED, 0.65mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

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 ± 0.1 (0.004") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPH-1608YC	Yellow (GaAsP/GaP)	Water Clear	3	8	120°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Yellow	590		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	Yellow	588		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Yellow	35		nm	I _F =20mA
C	Capacitance	Yellow	20		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Yellow	2.1	2.5	V	I _F =20mA
I _R	Reverse Current	Yellow		10	uA	V _R =5V

Notes:

1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

Parameter	Yellow	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

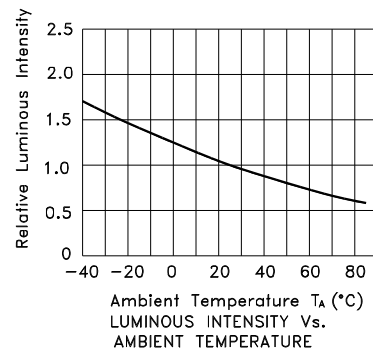
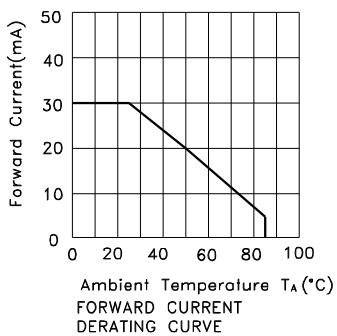
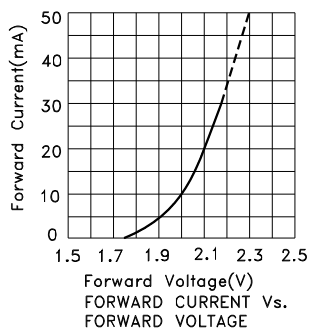
Note:

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



Yellow

KPH-1608YC



KPH-1608YC

Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

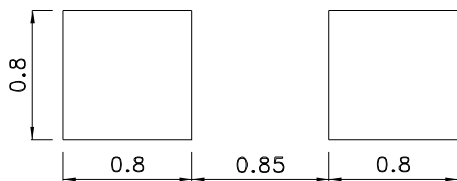
Reflow Soldering Profile For Lead-free SMT Process.



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.

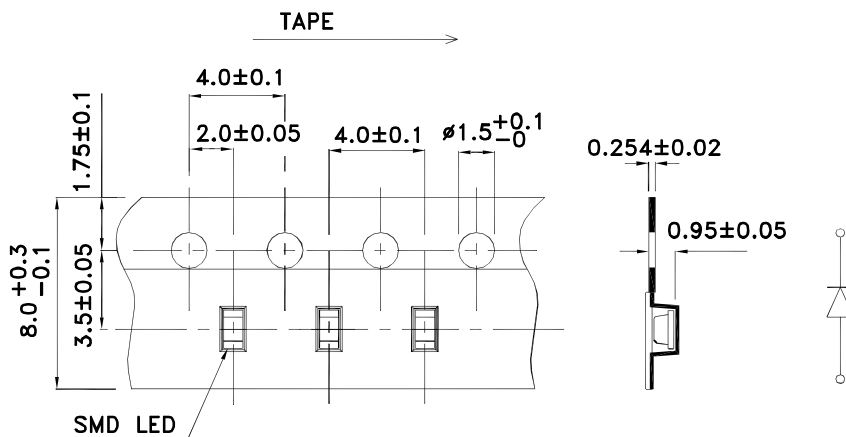
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



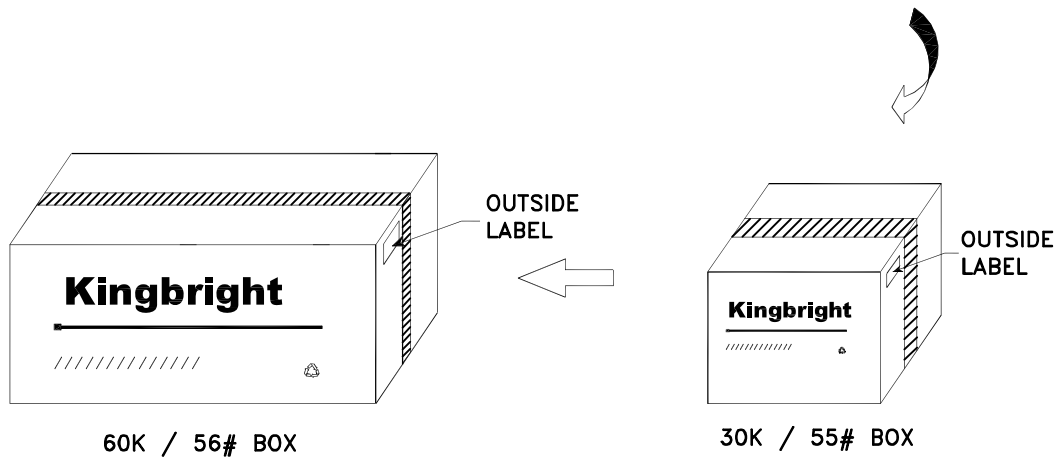
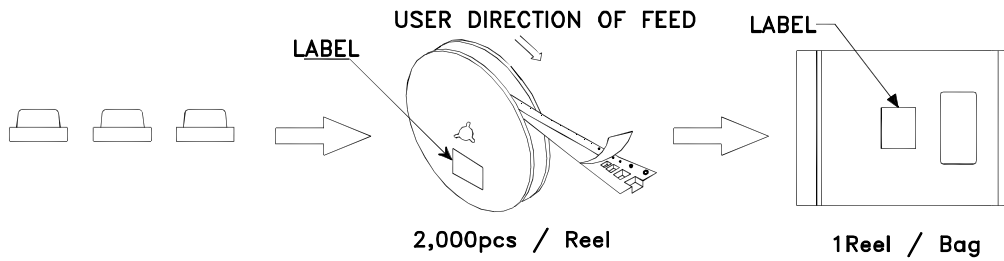
Tape Dimensions (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

KPH-1608YC



<h1>Kingbright</h1>					
P/NO: KPH-1608xxx					
QTY: 2,000 pcs	Q.C.	<table border="1" style="margin: auto;"> <tr><td>Q C</td></tr> <tr><td>XX XX XXXX</td></tr> <tr><td>PASSED</td></tr> </table>	Q C	XX XX XXXX	PASSED
Q C					
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S/N: XXXX					
CODE: XXX					
LOT NO:					
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RoHS Compliant					

Detailed application notes are listed on our website.
http://www.kingbright.com/application_notes