

WP138A8QMP/YD/TG

YELLOW

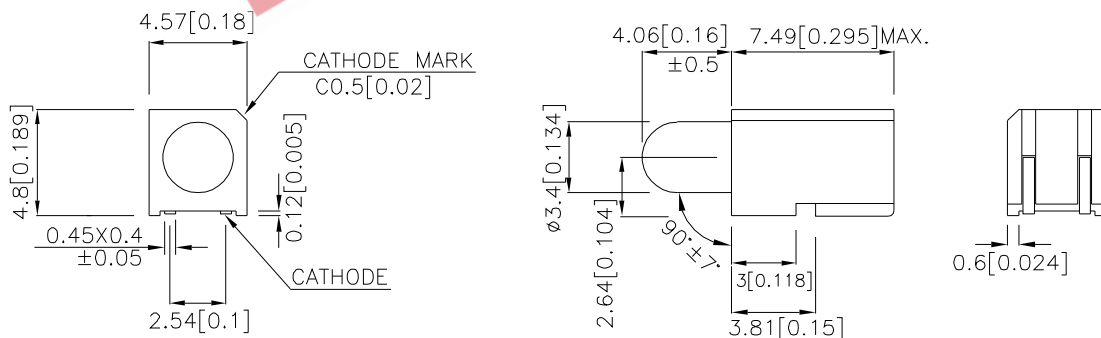
### Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- CAN BE ASSEMBLED WITH EACH OTHER.
- I.C.COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- HOUSING MATERIAL:PPA.
- PACKAGE:1000PCS / REEL.
- HIGH TEMPERATURE RESISTANT HOUSING.
- HIGH GLASS TRANSFER TEMPERATURE EPOXY.
- IN ACCORD WITH Kingbright ENVIRONMENTAL POLICY (DOCUMENT WI-QC-G-0442).
- 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 ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
WP138A8QMP/YD/TG	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	8	15	60°

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<sub>A</sub>=25°C

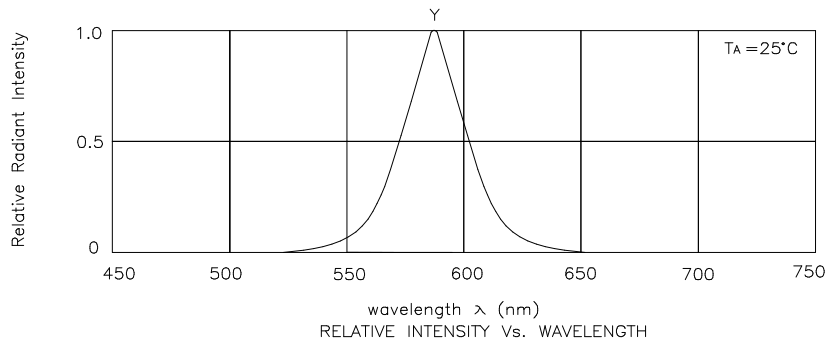
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Yellow	590		nm	I <sub>F</sub> =20mA
$\lambda_D$	Dominant Wavelength	Yellow	588		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Yellow	35		nm	I <sub>F</sub> =20mA
C	Capacitance	Yellow	20		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Yellow	2.1	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Yellow		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=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 / Storage Temperature	-40°C To +85°C	

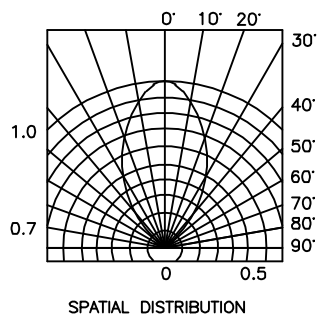
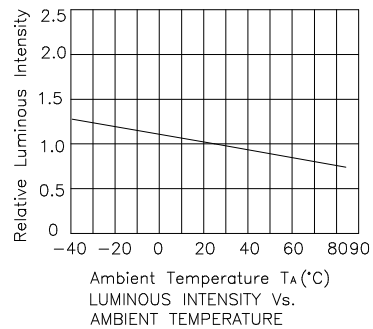
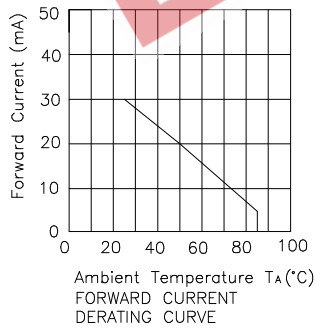
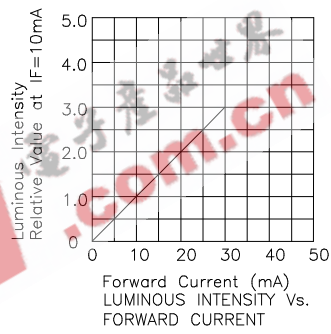
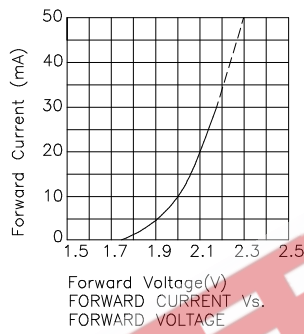
Note:

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



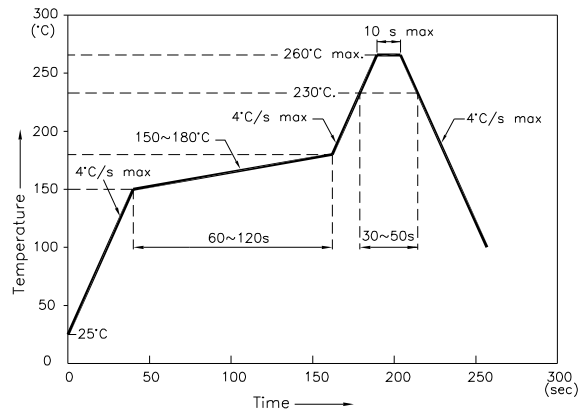
Yellow

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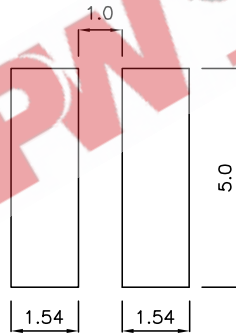
Reflow Soldering Profile For Lead-free SMT Process.



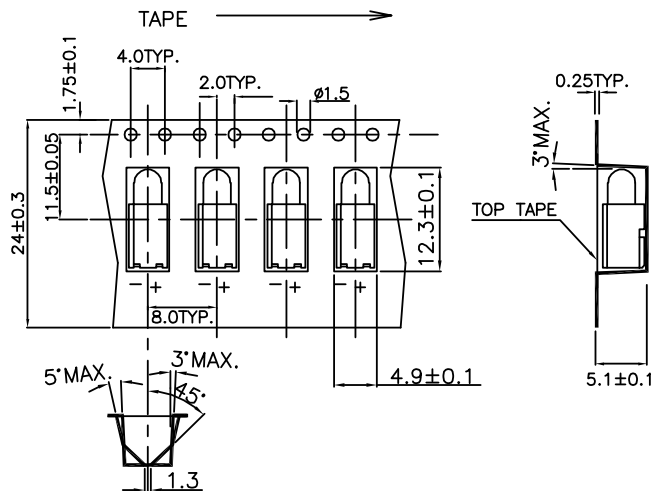
NOTES:

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)

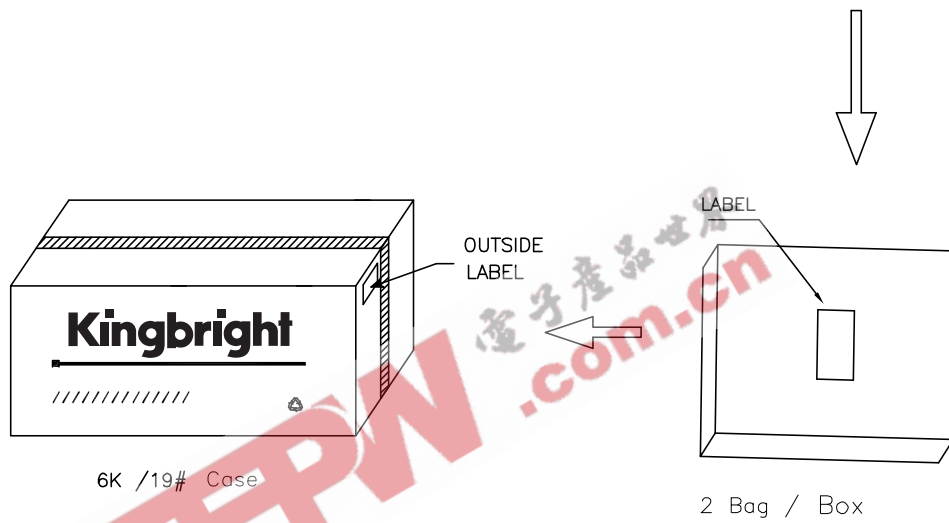
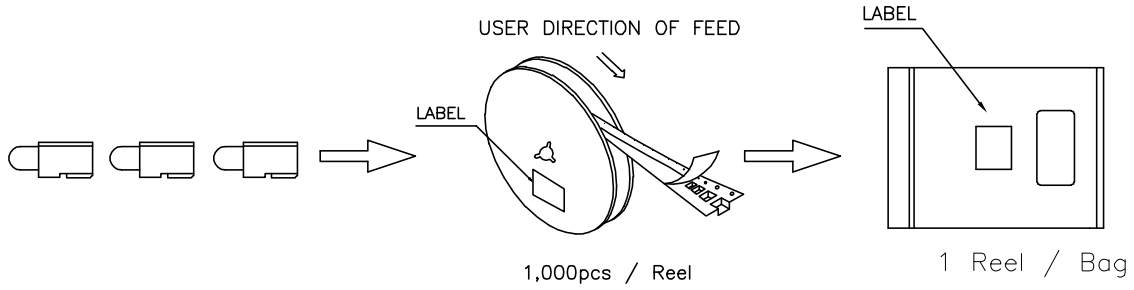



### Tape Specifications (Units : mm)



## PACKING & LABEL SPECIFICATIONS

WP138A8QMP/YD/TG



<b>Kingbright</b>				
Q.C.	<table border="1"> <tr> <td style="text-align: center;">QC</td> </tr> <tr> <td style="text-align: center;">xx xx. xxxx</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table>	QC	xx xx. xxxx	PASSED
QC				
xx xx. xxxx				
PASSED				
TYPE NO :	WP138A8QMP/xxx			
QUANTITY :	2,000 pcs			
S/N :	XXX			
CODE:	XXX			
LOT NO:				
MADE IN CHINA	RoHS Compliant			

Date

**Remarks:**

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

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

Note: Accuracy may depend on the sorting parameters.