

WP7676CSYC

SUPER BRIGHT YELLOW

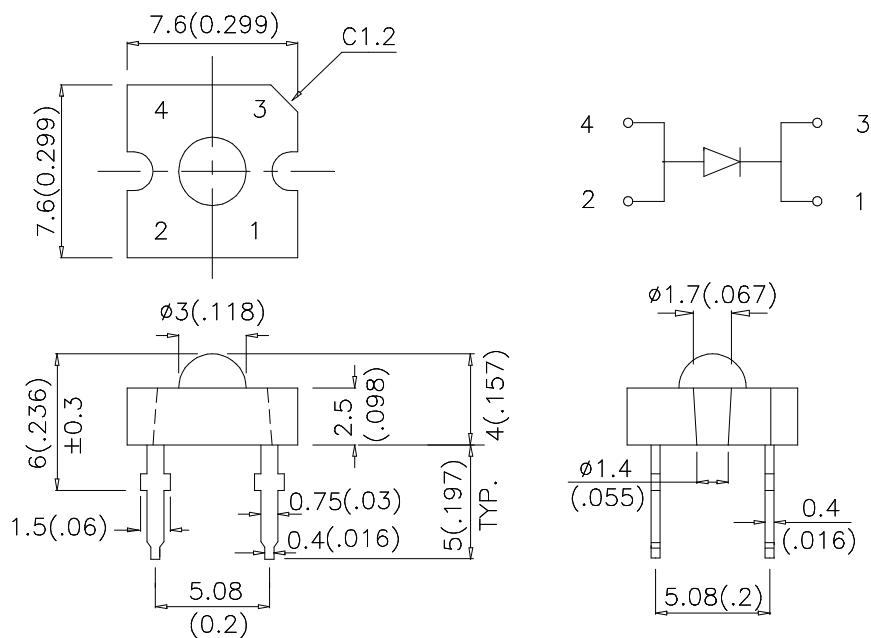
### Features

- SUPER FLUX OUTPUT.
- DESIGN FOR HIGH CURRENT OPERATION.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- RoHS COMPLIANT.
- UV RATED EPOXY.

### Description

The Super Bright Yellow device is made with DH InGaAlP (on GaAs substrate) light emitting diode chip.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

# Kingbright

## Selection Guide

Part No.	Dice	Lens Type	I <sub>v</sub> (mcd) @ 20mA *70mA		Viewing Angle
			Min.	Typ.	
WP7676CSYC	SUPER BRIGHT YELLOW (InGaAIP)	WATER CLEAR	180	400	70°
			*280	*700	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. \* Luminous intensity with asterisk is measured at 70mA under 40ms pulse width.
3. Drive current between 10mA and 30mA are recommended for long term performance.
4. Operation at current below 10mA is not recommended.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

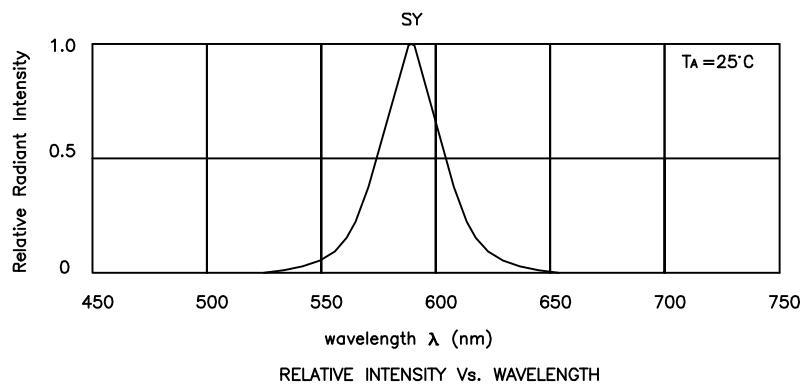
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	I <sub>F</sub> =20mA
λD	Dominant Wavelength	Super Bright Yellow	588		nm	I <sub>F</sub> =20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	28		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Yellow	25		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Yellow	2.0	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

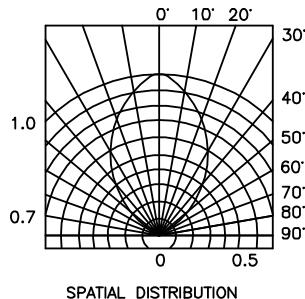
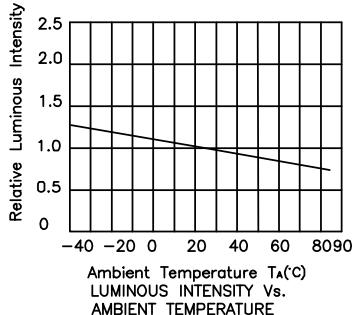
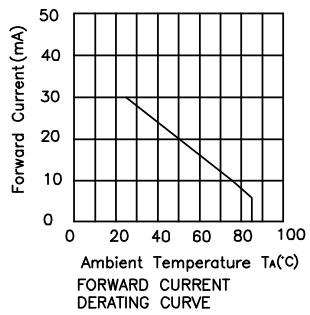
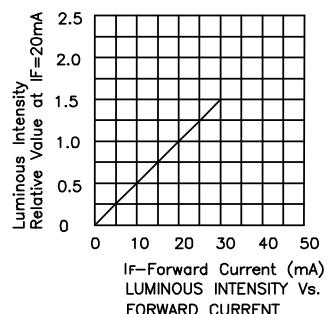
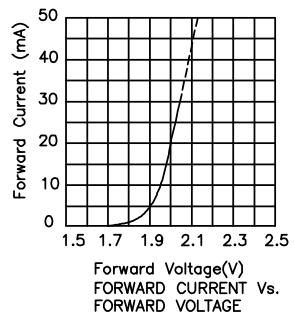
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



Super Bright Yellow

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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.