# **Kingbright**

### 7.6mmX7.6mm SUPER FLUX LED LAMP

WP7676CSYC

SUPER BRIGHT YELLOW

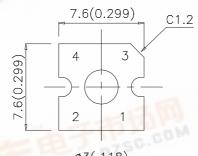
### **Features**

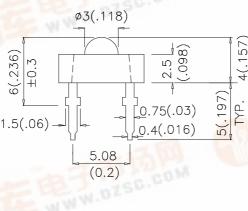
- •SUPER FLUX OUTPUT.
- •DESIGN FOR HIGH CURRENT OPERATION.
- OUTSTANDING MATERIAL EFFICIENCY.
- ●RELIABLE AND RUGGED.
- RoHS COMPLIANT.
- ●UV RATED EPOXY.

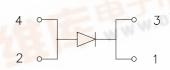
## Description

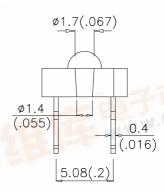
The Super Bright Yellow device is made with DH InGaAIP (on GaAs substrate) light emitting diode chip.

# Package Dimensions









#### Notes

- 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	lv (mcd) @ 20mA *70mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
WP7676CSYC	SUPER BRIGHT YELLOW (InGaAIP)	WATER CLEAR	180	400	70°
			*280	*700	

#### Notes:

- 1. 61/2 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 Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	28		nm	IF=20mA
С	Capacitance	Super Bright Yellow	25		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
lR	Reverse Current	Super Bright Yellow		10	uA	VR = 5V

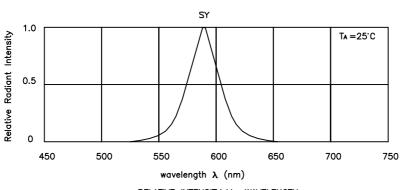
# Absolute Maximum Ratings at TA=25°C

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				

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

SPEC NO: DSAF2277 **REV NO: V.1** DATE:APR/15/2005 PAGE: 2 OF 3

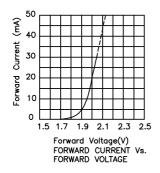
# Kingbright

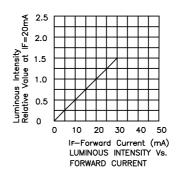


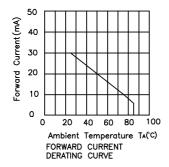
RELATIVE INTENSITY Vs. WAVELENGTH

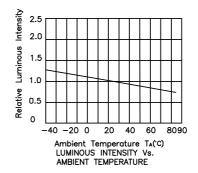
**Super Bright Yellow** 

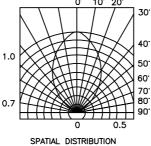
### WP7676CSYC











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.

SPEC NO: DSAF2277 **REV NO: V.1** DATE: APR/15/2005 PAGE: 3 OF 3