

L-814PWC

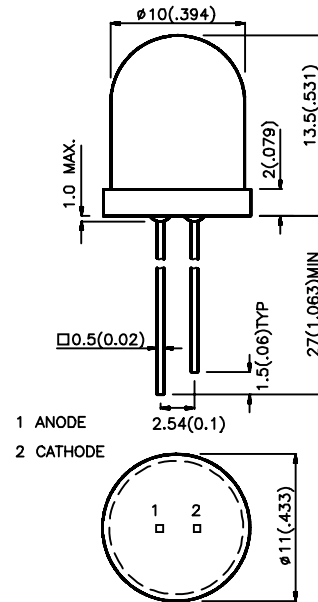
### Features

- ULTRA BRIGHTNESS.
- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

### Description

The source color devices are made with InGaN on SiC Light Emitting Diode.

### 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 lead emerge package.
4. Specifications are subjected to change without notice.

### Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
L-814PWC	WHITE (InGaN)	WATER CLEAR	400	600	40°

### 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 $T_A=25^\circ\text{C}$

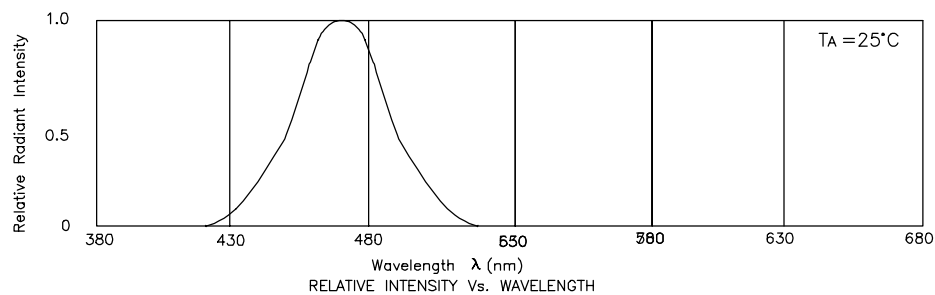
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$V_F$	Forward Voltage	White	3.6	4.0	V	$I_F=20\text{mA}$
$I_R$	Reverse Current	White	10		$\mu\text{A}$	$V_R = 5\text{V}$
X	Chromaticity Coordinates	White	0.31			
Y			0.32			

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

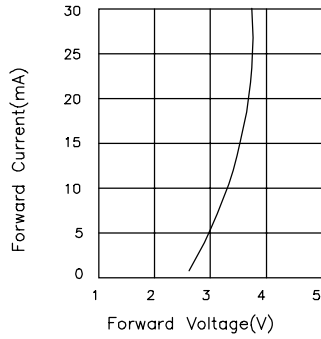
Parameter	White	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating Temperature	-30 °C To + 80 °C	
Storage Temperature	-40 °C To + 100 °C	
Lead Soldering Temperature [2]	260 °C For 5 Seconds	

### Notes:

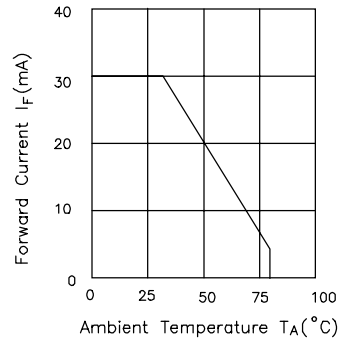
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



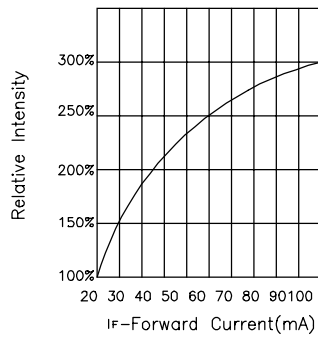
## White L-814PWC



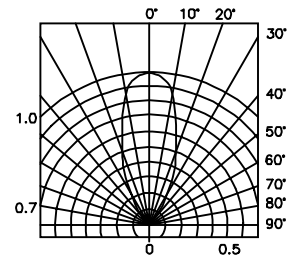
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



RELATIVE INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION