



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Cree® P4 LED

## Model # LP368PWN1-D0G

### Data Sheet

130-degree, 7.6 x 7.6 mm LED lamp in white color with water-transparent lens and stopper

#### Applications

- Indicators
- Illuminations

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

Items	Symbol	Absolute Maximum Rating	Unit
Forward Current	$I_F$	30	mA
Peak Forward Current <small>Note</small>	$I_{FP}$	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	132	mW
Operation Temperature	$T_{opr}$	-40 ~ +95	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 ~ +100	$^\circ\text{C}$
Lead Soldering Temperature	$T_{sol}$	Max. 260 $^\circ\text{C}$ for 3 sec. max. (3 mm from the base of the epoxy bulb)	

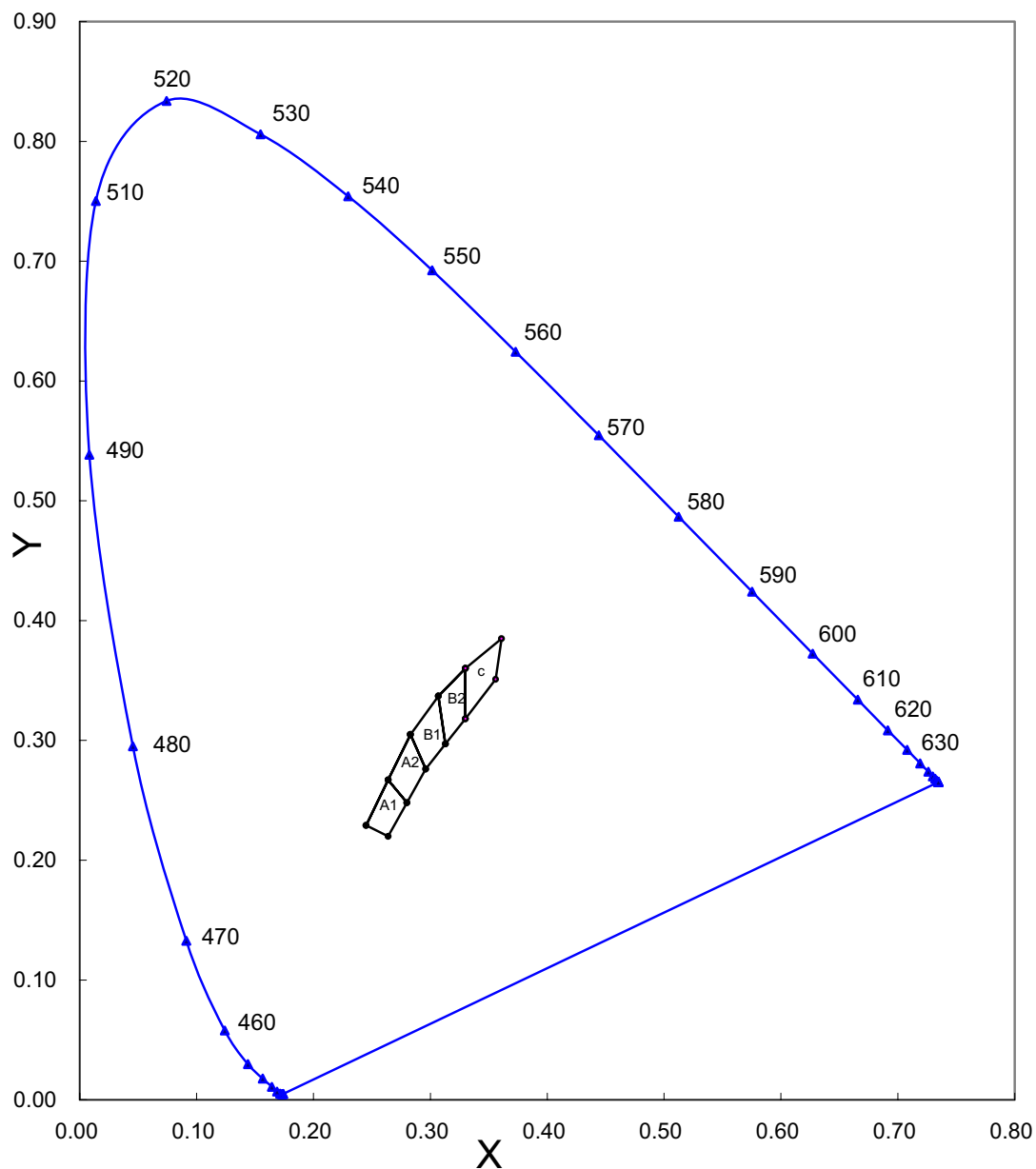
**Note:** Pulse width  $\leq 0.1$  msec, duty  $\leq 1/10$ .

#### Typical Electrical & Optical Characteristics ( $T_A = 25^\circ\text{C}$ )

Characteristics	Symbol	Condition	Unit	Minimum	Typical	Maximum
Forward Voltage	$V_F$	$I_F = 30$ mA	V		3.6	4.4
Reverse Current	$I_R$	$V_R = 5$ V	$\mu\text{A}$			100
Luminous Intensity	$I_v$	$I_F = 30$ mA	mcd	280	400	
Luminous Flux	$\Phi_v$	$I_F = 30$ mA	mlm		1100	
Chromaticity Coordinates	x	$I_F = 30$ mA			0.31	
	y	$I_F = 30$ mA			0.32	
50% Power Angle	$2\theta_{1/2H-H}$	$I_F = 30$ mA	deg		130	



## CIE Chromaticity Diagram





## Graphs

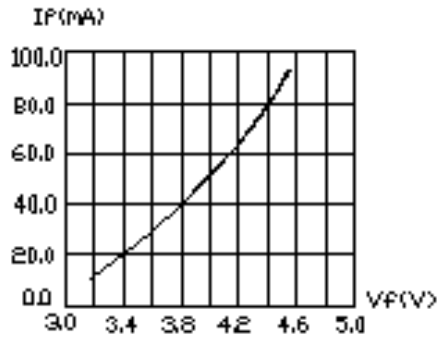


FIG1 FORWARD CURRENT VS. FORWARD VOLTAGE

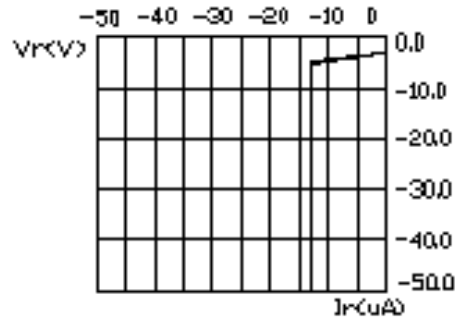


FIG2 REVERSE CURRENT VS. REVERSE VOLTAGE

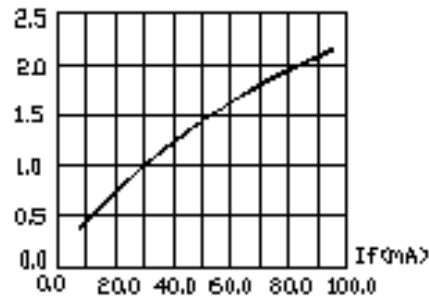


FIG3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

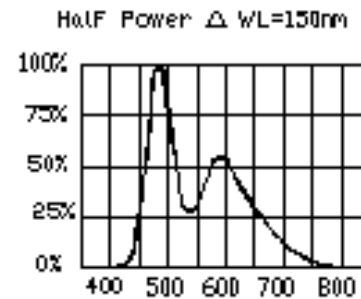


FIG4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

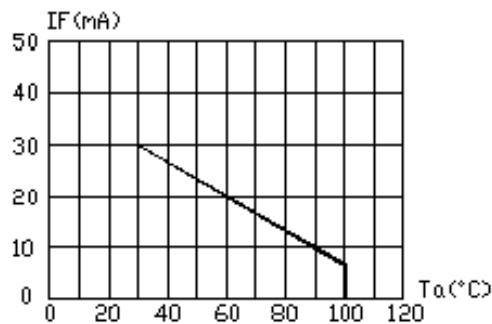


FIG5 MAXIMUM FORWARD CURRENT VS. AMBIENT TEMPERATURE ( $T_{jmax}=120^{\circ}\text{C}$ )

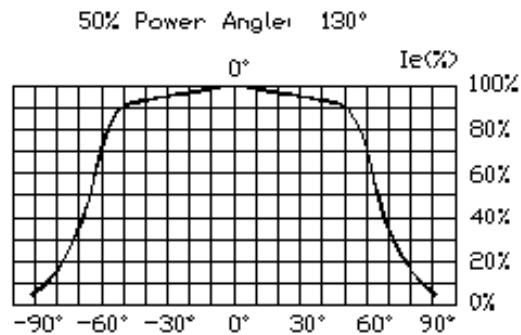


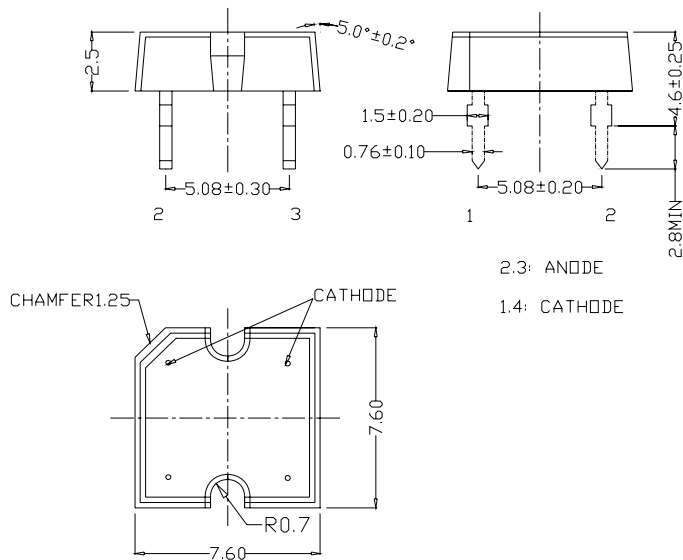
FIG6 FAR FIELD PATTERN

## Mechanical Dimensions

All dimensions are in mm. Tolerance is  $\pm 0.25$  mm unless otherwise noted.

An epoxy meniscus may extend about 1.5 mm down the leads.

Burr around bottom of epoxy may be 0.5 mm max.



## Notes

### RoHS Compliance

The levels of environmentally sensitive, persistent biologically toxic (PBT), persistent organic pollutants (POP), or otherwise restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended through April 21, 2006.

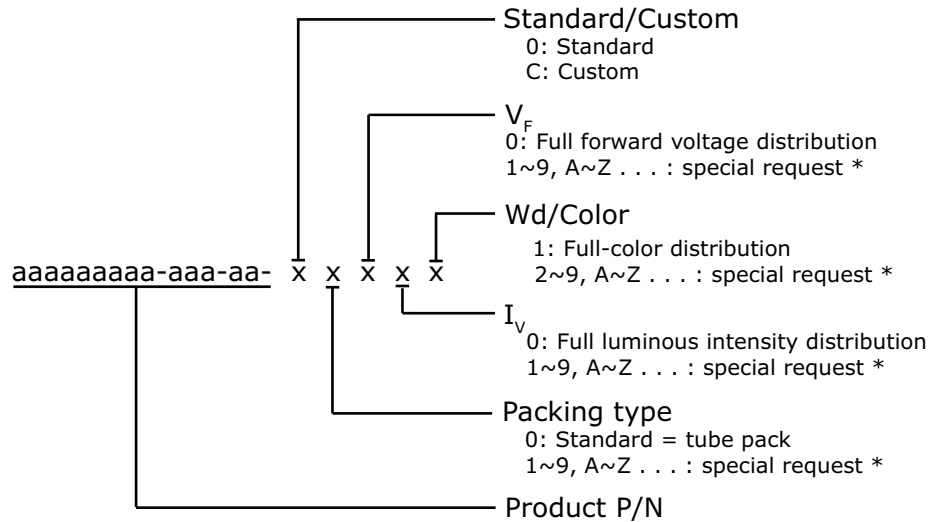
### Vision Advisory Claim

Users should be cautioned not to stare at the light of this LED product. The bright light can damage the eye.

## Kit Number System

Cree LED lamps are tested and sorted into performance bins. A bin is specified by ranges of color, forward voltage, and brightness. Sorted LEDs are packaged for shipping in various convenient options. Please refer to the "Cree LED Lamp Packaging Standard" document for more information about shipping and packaging options.

Cree LEDs are sold by order codes in combinations of bins called kits. Order codes are configured in the following manner:



\* Contact your Cree sales representative for ordering information.

## Standard Available Kits\*

Kit Number	Description
LP368PWN-D0G-00001	P4 130 White, FULL RANK, Tube Pack
LP368PWN-D0G-00002	P4 130 White, A1, A2, B1, B2, Tube Pack

\* Please contact your Cree representative about the availability of non-standard kits.