

## SPECIFICATION FOR KEE TAT LED LAMP

KEETAT Document No.: SPC/KT-5JWNC7GG0-518

KEETAT Model No.: KT-5JWNC7GG0-518

Customer Part No.:

Sample No.: KT-WN4473

Rev. No.: 02

Date: 2011-09-16

Description:

5mm Straw hat LED Lamp in Long-lead White Color with Water Transparent Lens

Dice Material: InGaN

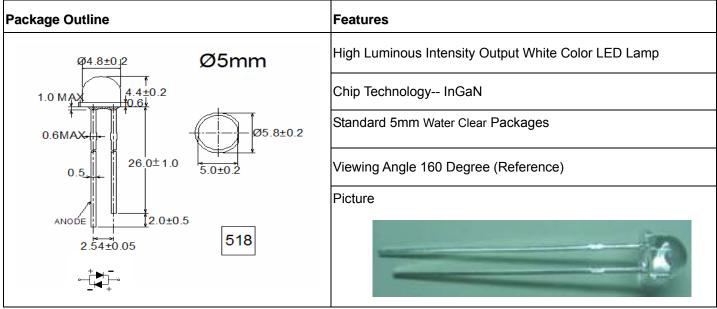
# Formal Specification





Approved By Customer	Confirmed By KEETAT
	No. 型 工程文件 多子部





## Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Absolute maximum Rating	Unit	
Forward Current	I <sub>F</sub>	20	mA	
Peak Forward Current*	I <sub>FP</sub>	100	mA	
Reverse Voltage	V <sub>R</sub>	5	V	
Power Dissipation	P <sub>D</sub>	72	mW	
Operation Temperature	T <sub>opr</sub>	-30 ~ +80	${\mathbb C}$	
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	$^{\circ}$	
Lead Soldering Temperature	T <sub>sol</sub>	260°C for 5sec Max		

<sup>\*</sup> Where pulse width <= 0.1msec, duty cycle <= 1/10

### Typical Electrical & Optical Characteristics at Ta = 25°C

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Luminous Intensity	lv	I <sub>F</sub> =20mA	550	850	1250	mcd
Forward Voltage	$V_{F}$	I <sub>F</sub> = 20mA	2.8	3.2	3.6	V
Chromaticity Coordinates	х	I <sub>F</sub> =20mA		0.31		
Chromaticity Coordinates		I <sub>F</sub> =20mA		0.31		
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	μΑ
50% Power Angle	20½	I <sub>F</sub> =20mA		160		deg

### **Luminous Intensity Bin Table (IF = 20mA):**

Rank Name	Min (mcd)	Max (mcd)
1	550	1250

<sup>\*</sup>Tolerance for each bin limit is  $\pm$  15%

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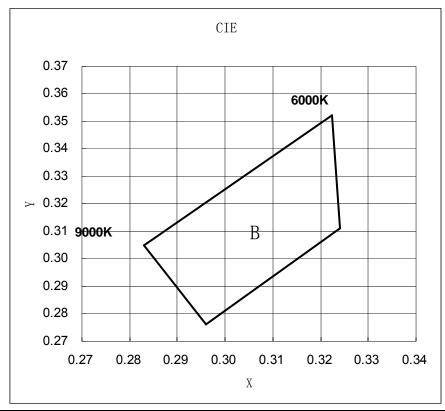


## Forward Voltage Bin Table (IF = 20mA):

Rank Name	Min (V)	Max (V)
1	2.8	3.6

<sup>\*</sup>Tolerance for each bin limit is  $\pm 0.1 V$ 

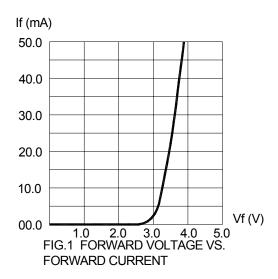
## Color Bin Table (IF=20mA):

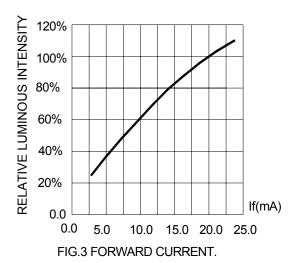


WN	X1	Y1	X2	Y2	Х3	Ү3	X4	Y4
В	0.283	0.305	0.3223	0.3523	0.324	0.311	0.296	0.276

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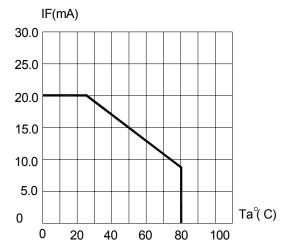


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON Tjmax=110 $^{\circ}$ C

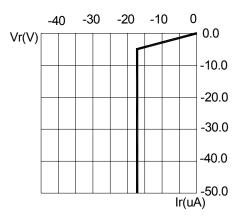


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

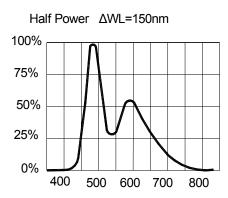


FIG.4 RELATIVE LUMINOUS FLUX VS. WAVELENGTH.

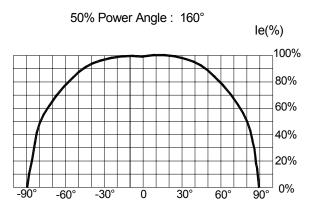
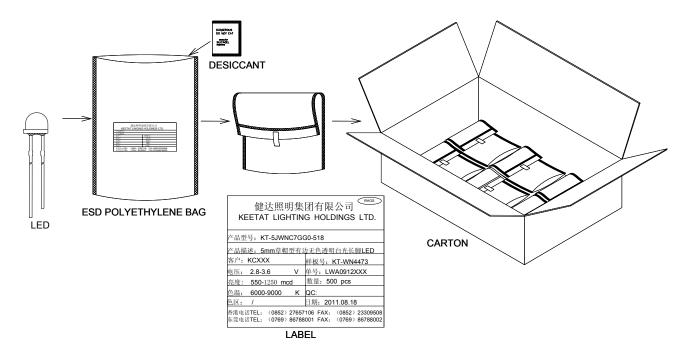


FIG.6 FAR FIELD PATTERN

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#### **Important Notes:**

- 1) Do not apply any stress to the lead, particularly when heated.
- 2) The LEDs must not be repositioned after soldering.
- 3) After soldering the LEDs, the epoxy bulb should be protected from mechanical shock or vibration until the LEDs return to room temperature.
- 4) Direct soldering onto a PC board should be avoided, Mechanical stress to the resin may be caused by the PC board warping or from the clinching and cutting of the lead frames, When it is absolutely necessary, the LEDs may be mounted in this fashion, but, the User will assume responsibility for any problems, Direct soldering should only be done after testing has confirmed that no damage, such as wire bond failure or resin deterioration, will occur.
- 5) When it is necessary to clamp the LEDs to prevent soldering failure, it is important to minimize the mechanical stress on the LEDs.
- 6) Cut the LED leadframes at room temperature, Cutting the lead frames at high temperatures may cause LED failure.
- 7) Customer acknowledges that it should not operate the samples beyond the level recommended in the specification guidelines.

Item	Signatures	Date			Revision History
Prepared by	Huai Wang	2011-09-16	Rev. No	Date	Change Description
Checked by	Frank Yan	2011-09-16			
Approved by	Bill Zhang	2011-09-16			
FCN#					

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