

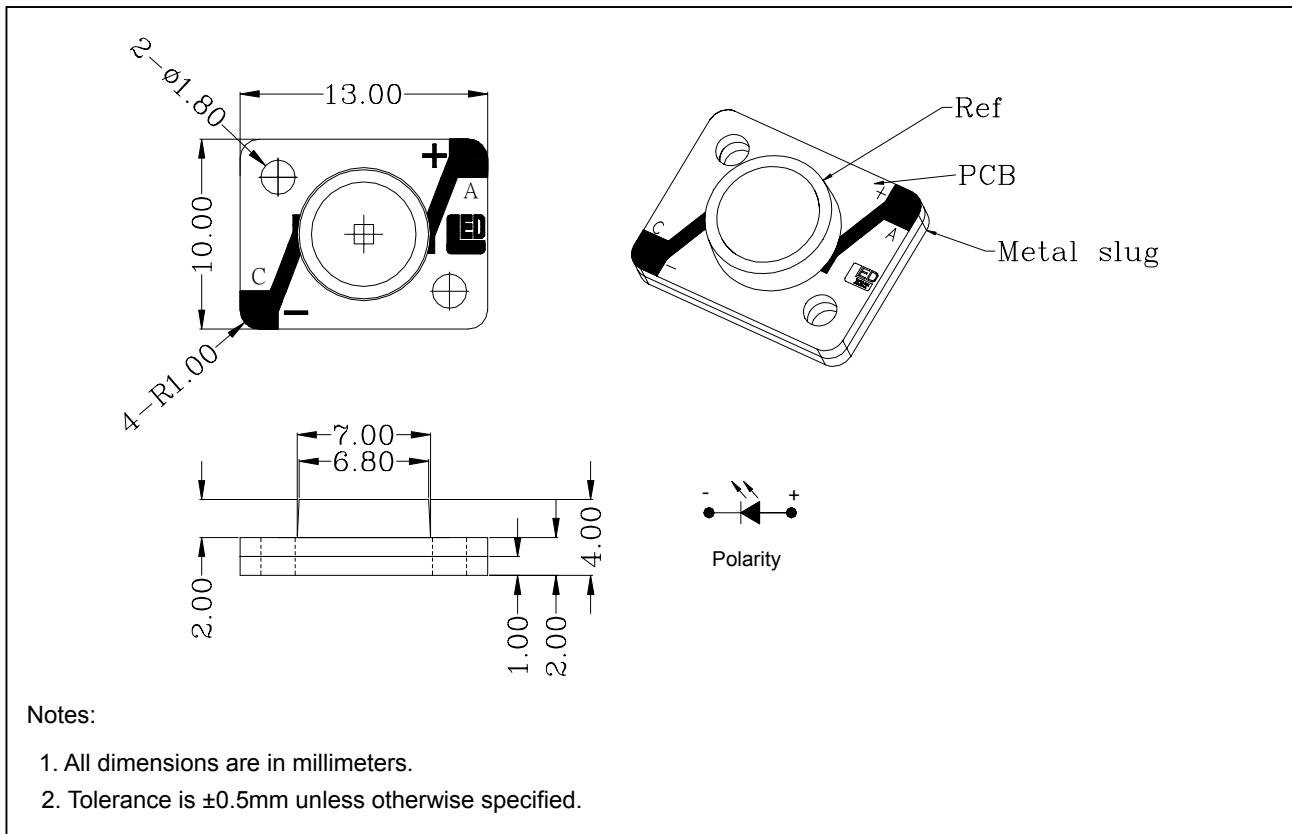
### ● Features:

1. Input power: 1W.
  2. Chip material: InGaN, Flip chip.
  3. Emitted color: White.
  4. High lumen output.
  5. High flux density.
  6. Low power consumption.
  7. Efficient heat transfer.
  8. Add extra heat sink is necessary.
- \* Must increasing heatsink, let the unit temperature below 60 °C.

### ● Applications:

1. Torch.
2. Head Light.
3. Architectural Lighting.
4. LCD Backlight.

### ● Package dimensions :



● **Absolute maximum ratings (T<sub>J</sub>=25°C)**

Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	1.0	W
DC Forward Current* <sup>1</sup>	I <sub>F</sub>	350	mA
Peak Pulsed Forward Current* <sup>2</sup>	I <sub>FP</sub>	1.0	A
LED Junction Temperature	T <sub>J</sub>	130	°C
Operating Temperature	T <sub>opr</sub>	-30~120	°C
Storage Temperature	T <sub>stg</sub>	-40~120	°C
Reverse Voltage	V <sub>R</sub>	5	V
Soldering Temperature (T=5 sec)	T <sub>sol</sub>	300 ± 5	°C

\*<sup>1</sup>Proper current derating must be followed to keep LED junction temperature (T<sub>J</sub>) below the maximum.

\*<sup>2</sup>Condition for I<sub>FP</sub> is pulsed with 1/10 duty and 0.1msec width.

● **Electrical & Optical Characteristics (T<sub>J</sub>=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =350mA	-	3.5	4.0	V
Total Flux	Φ <sub>v</sub>	I <sub>F</sub> =350mA	25	35	-	lm
Color Temperature	CCT	I <sub>F</sub> =350mA	5000	6500	8000	K
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	50	μA
Thermal Resistance, Junction To Case	R <sub>J-C</sub>	I <sub>F</sub> =350mA	-	15	-	°C/W
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> = 350mA	-	120	-	degree
Chromaticity Coordinates	x	I <sub>F</sub> =350mA	-	0.32	-	
	y	I <sub>F</sub> =350mA	-	0.31	-	

### ● Typical electro-optical characteristics curves

Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

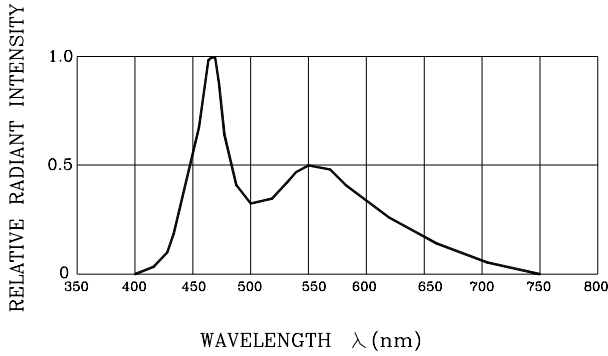


Fig.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

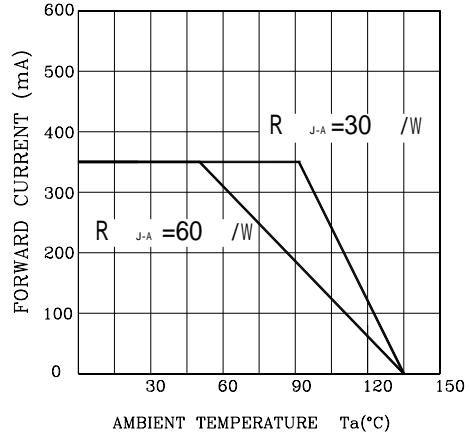


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE

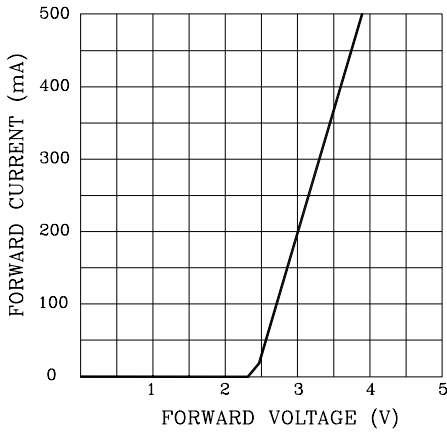


Fig.4 RELATIVE LUMINOUS INTENSITY VS. JUNCTION TEMPERATURE

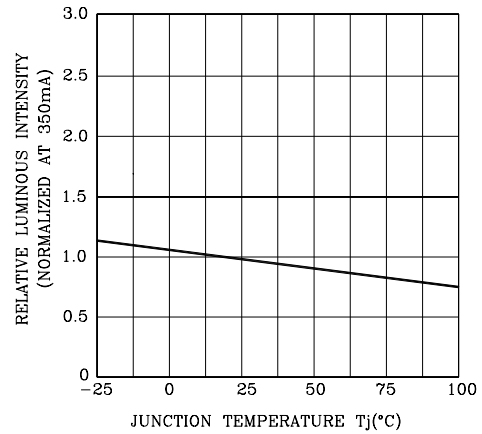


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

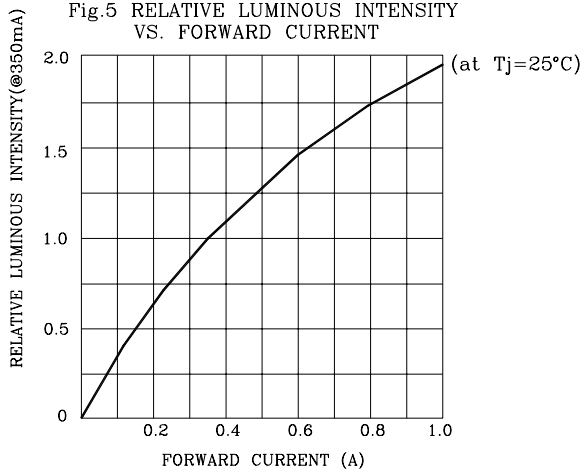
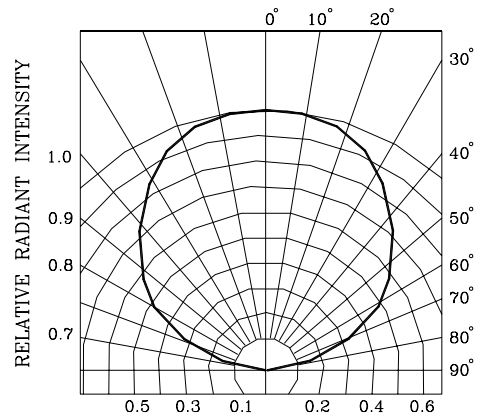
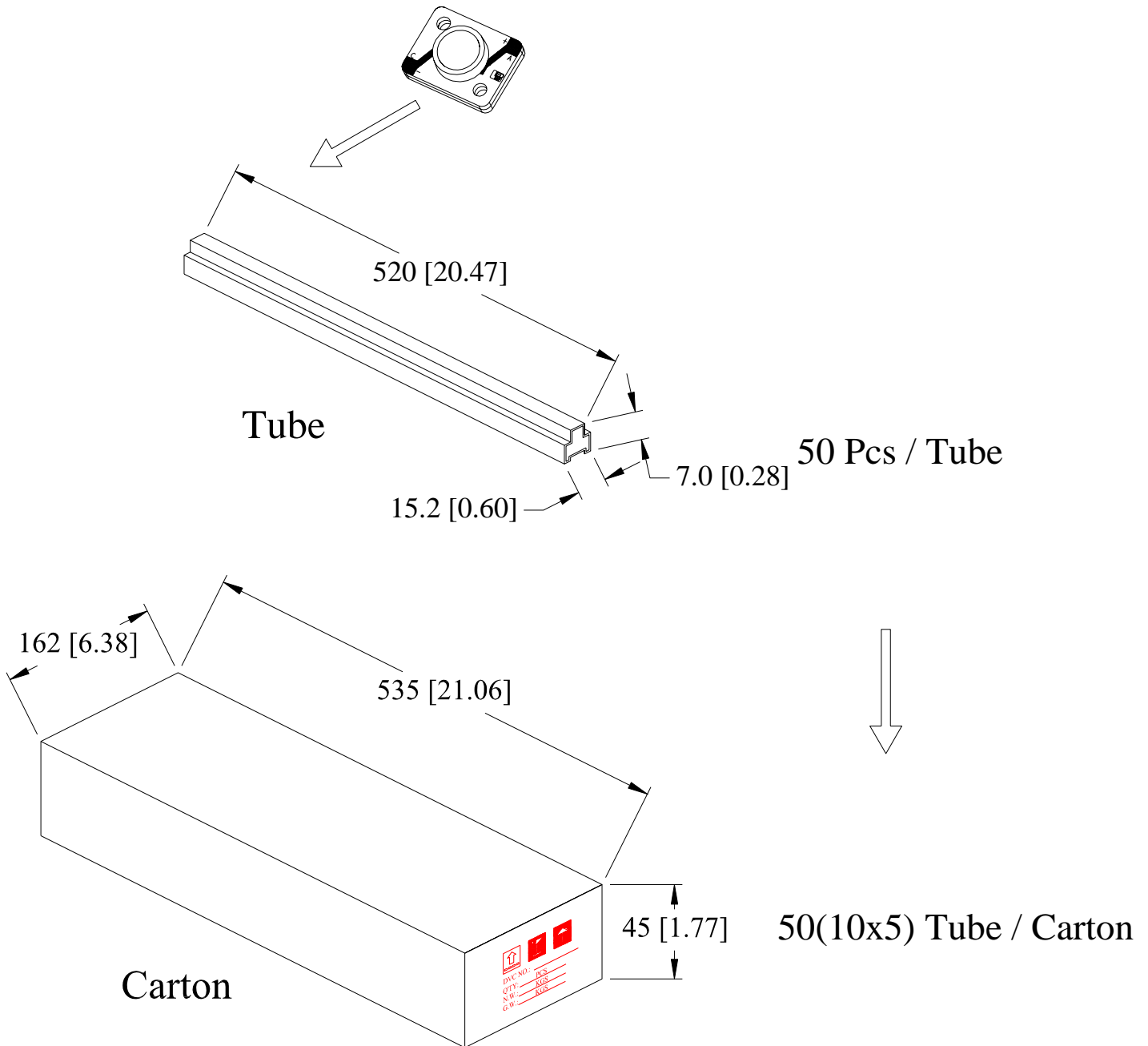


Fig.6 RADIATION DIAGRAM



● Package Method : (unit:mm)



NOTES : Tube : Tolerance is  $\pm 5$  mm unless otherwise noted.

Carton : Tolerance is  $\pm 10$  mm unless otherwise noted.

● Total Flux Bin Limits (At 350mA)

BIN CODE	Min. (lm)	Max. (lm)
K	25	33
L	33	42
M	42	55

Tolerance for each Bin limit is  $\pm 15\%$

● Color Temperature Bin Limits(At 350mA)

BIN CODE	Min. (K)	Max. (K)
4	5000	6000
5	6000	7000
6	7000	8000

Tolerance for each Bin limit is  $\pm 500\text{ K}$



Notes:

1. Bin categories are established for classification of products. Products may not be available in all bin categories.