



●DEVICE NUMBER : BWL-6C1W06

佰鴻工業股份有限公司
BRIGHT LED ELECTRONICS CORP.
台北縣板橋市和平路 19 號 3 樓
3F., No. 19, Ho Ping Road, Pan Chiao City,
Taipei, Taiwan, R. O. C.
Tel: 886-2-29591090
Fax: 886-2-29547006/29558809
www.brtled.com

APPROVED	DRAWER
羅 2009.04.27 豐	劉 2009.04.27 秋 曉

● Features:

1. Input power: 1W.
2. Chip material: InGaN.
3. Emitted color: Warm white.
4. High lumen output.
5. High flux density.
6. Low power consumption.
7. Efficient heat transfer.
8. Add extra heat sink is necessary.

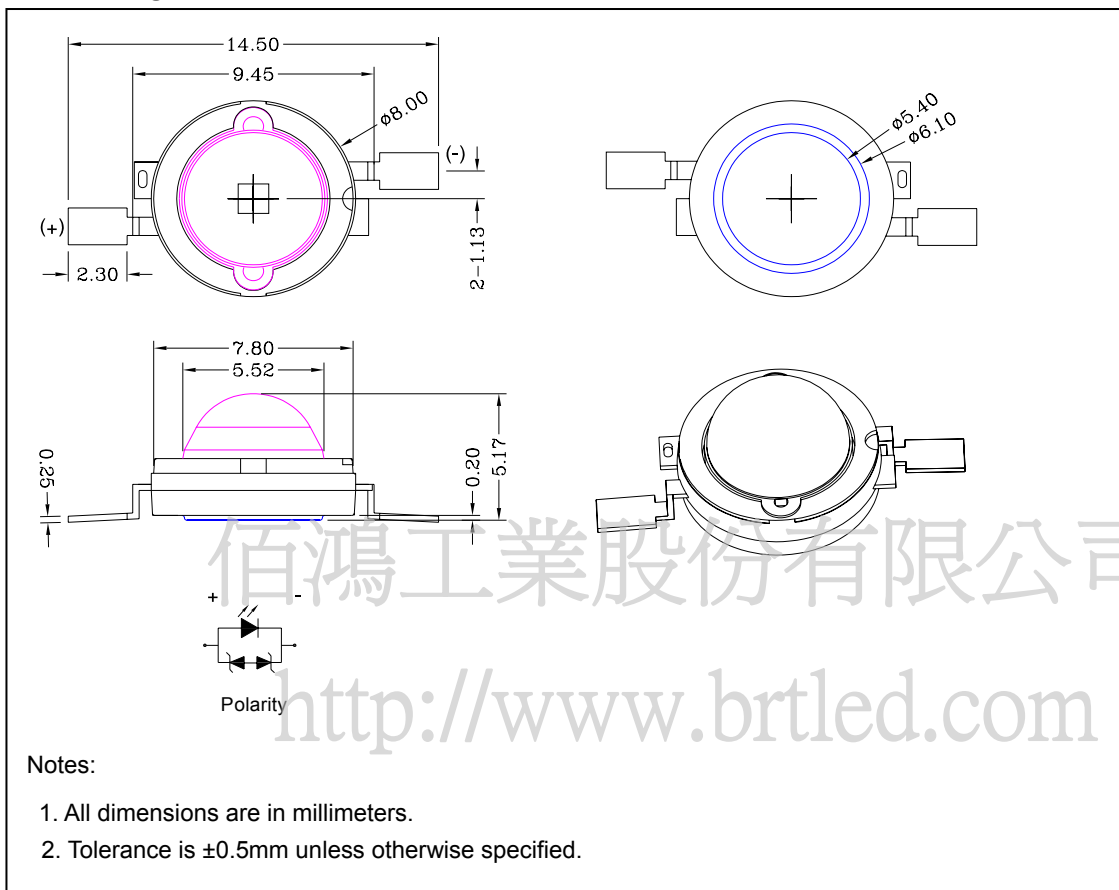
* Must increasing heatsink, let the unit temperature below 60 °C.



● Applications:

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

● Package dimensions :



● Absolute maximum ratings ($T_J=25^{\circ}\text{C}$)

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	1.0	W
DC Forward Current ^{*1}	I_F	350	mA
Peak Pulsed Forward Current ^{*2}	I_{FP}	1.0	A
LED Junction Temperature	T_J	130	$^{\circ}\text{C}$
Operating Temperature	T_{opr}	-30~120	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40~120	$^{\circ}\text{C}$
Reverse Voltage	V_R	5	V
Soldering Temperature (T=5 sec)	T_{sol}	300 ± 5	$^{\circ}\text{C}$

^{*1}Proper current derating must be followed to keep LED junction temperature (T_J) below the maximum.

^{*2}Condition for I_{FP} is pulsed with 1/10 duty and 0.1msec width.

● Electrical & Optical Characteristics ($T_J=25^{\circ}\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 350\text{mA}$	-	3.5	4.0	V
Total Flux	Φ_v	$I_F = 350\text{mA}$	60	65	-	lm
Color Temperature	CCT	$I_F = 350\text{mA}$	2700	-	3710	K
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	50	μA
Thermal Resistance, Junction To Case	$R_{\theta J-C}$	$I_F = 350\text{mA}$	-	9	-	$^{\circ}\text{C/W}$
Viewing Angle	$2\theta_{1/2}$	$I_F = 350\text{mA}$	-	120	-	degree

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Typical electro-optical characteristics curves

Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

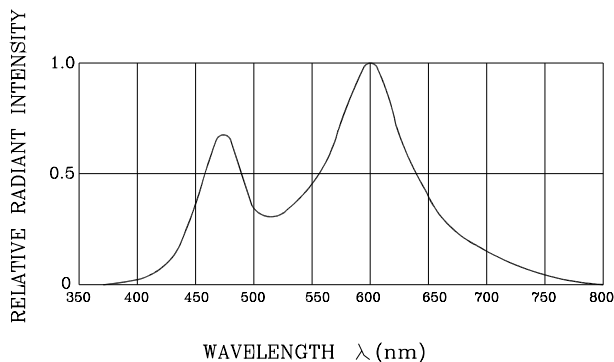


Fig.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

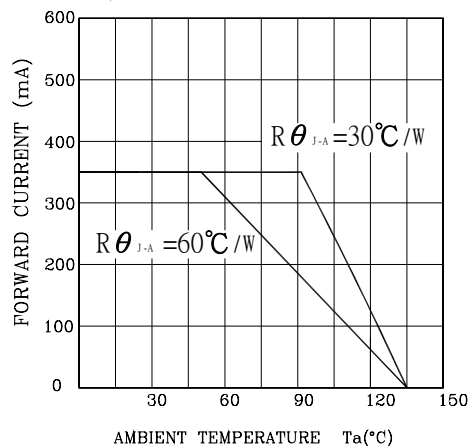


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE

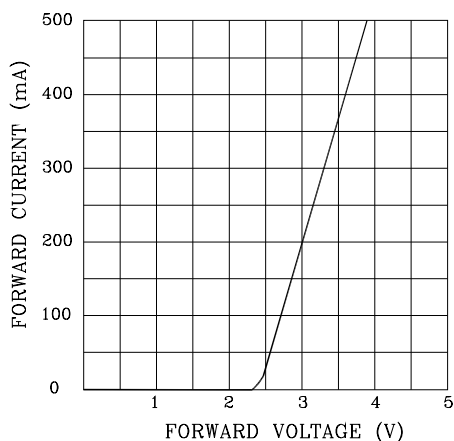


Fig.4 RELATIVE LUMINOUS INTENSITY VS. JUNCTION TEMPERATURE

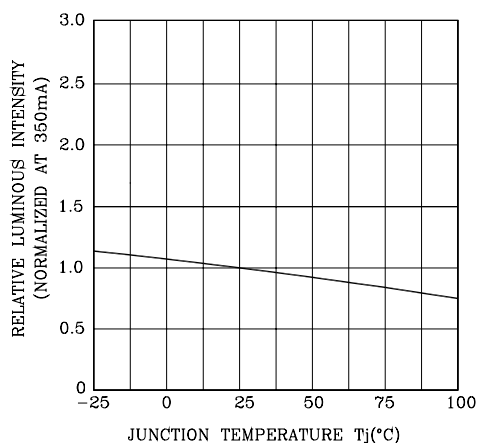


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

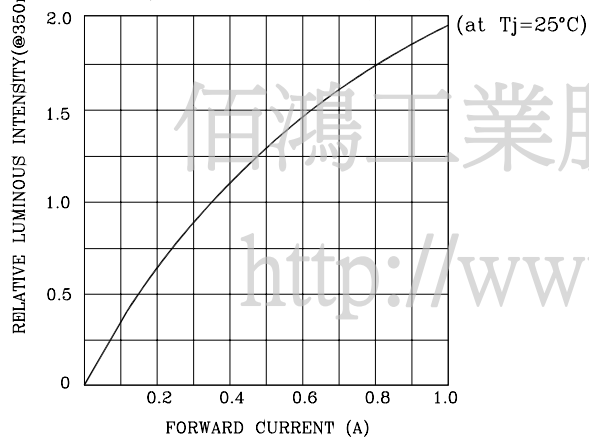
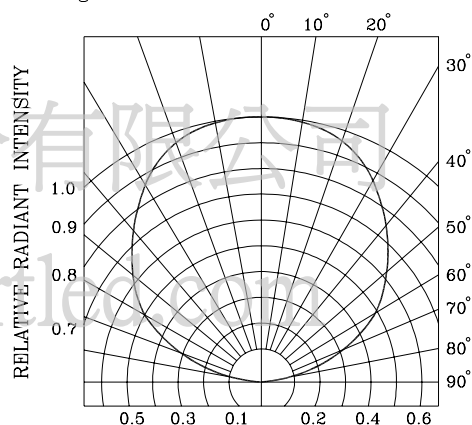
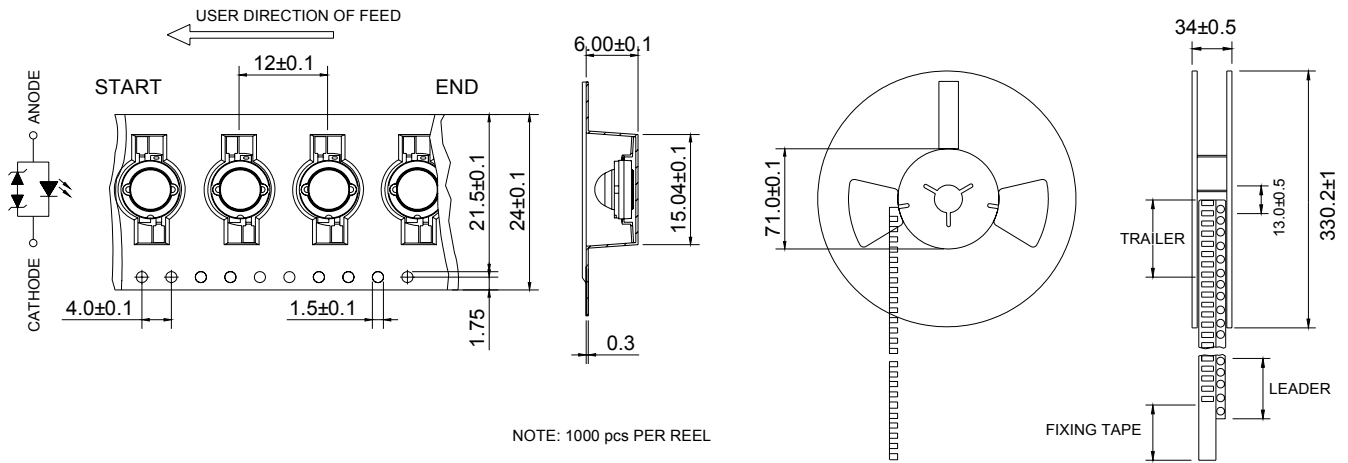


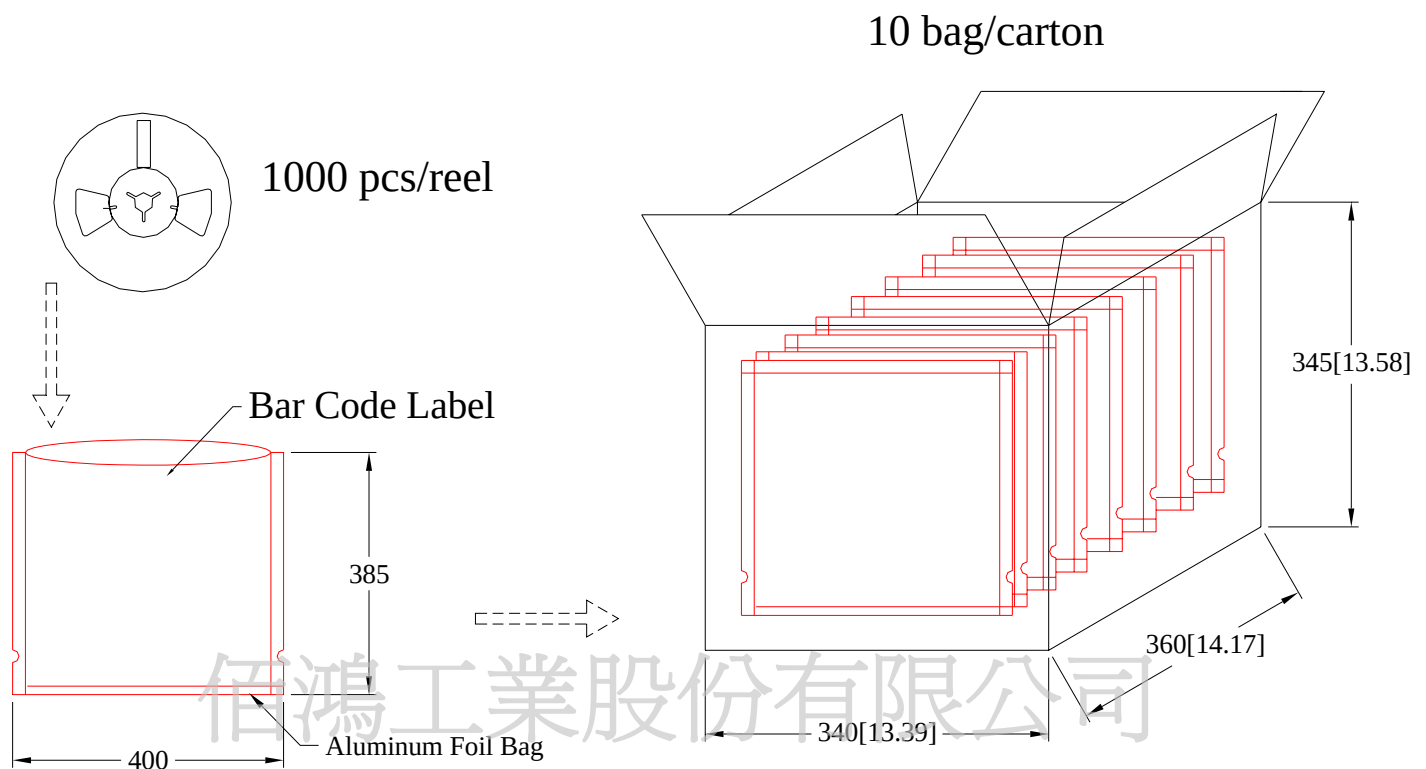
Fig.6 RADIATION DIAGRAM



● Tapping and packaging specifications(Units: mm)



● Package Method : (unit:mm)



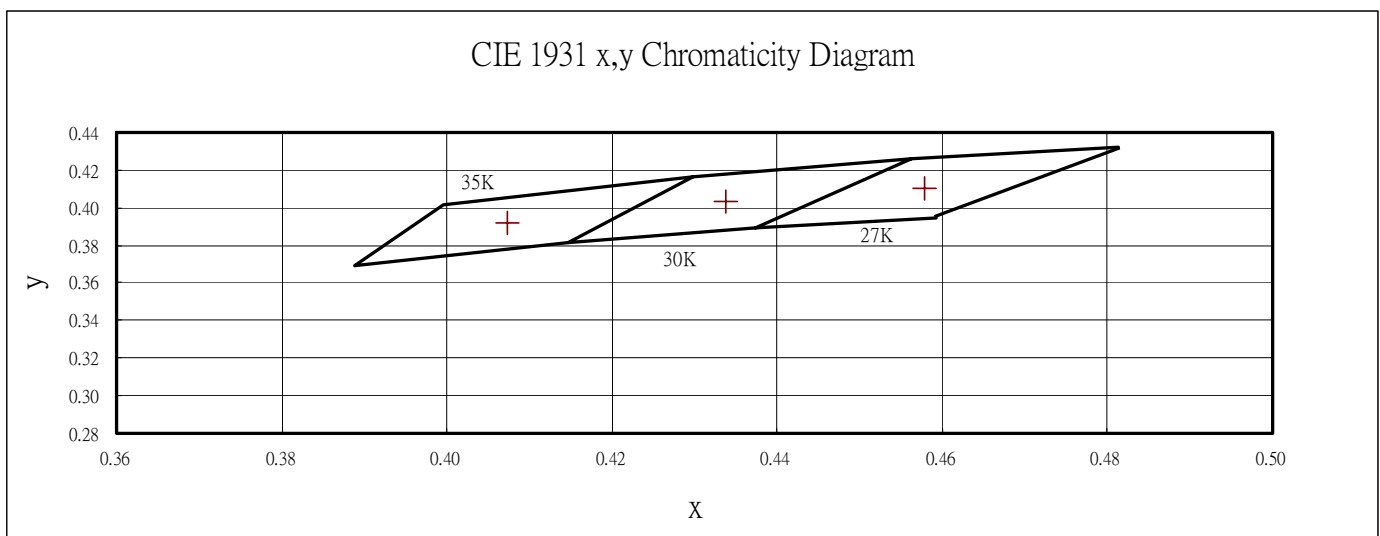
NOTES : Bag : Tolerance is ± 5 mm unless otherwise noted.
Carton : Tolerance is ± 10 mm unless otherwise noted.

● Total Flux Bin Limits (At 350mA)

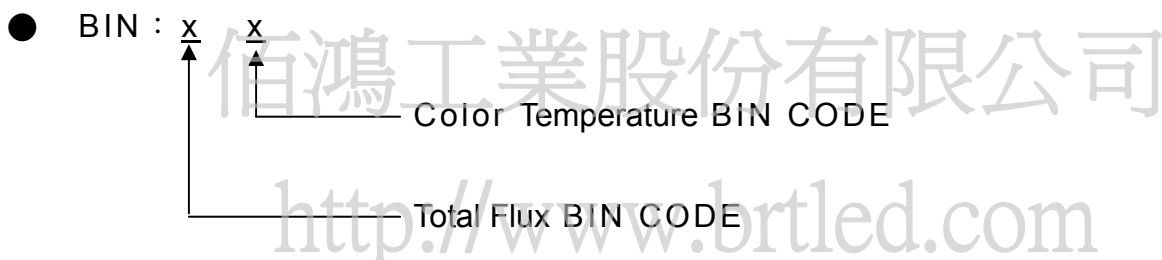
BIN CODE	Min. (lm)	Max. (lm)
N	60	72

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

● Color Temperature Bin Limits(At 350mA)



BIN CODE	Nominal CCT	CCT Range	Chromaticity Coordinates			
K27	2700K	2580-2870	x	0.4578	0.4813	0.4562
			y	0.4101	0.4319	0.4260
K30	3000K	2871-3220	x	0.4338	0.4562	0.4299
			y	0.4030	0.4260	0.4165
K35	3500K	3221-3710	x	0.4073	0.4299	0.3996
			y	0.3917	0.4165	0.4015



Notes:

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