



BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

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REVISION: 1.0

● COMMODITY : LAMP/HOLDER ASSEMBLY

● DEVICE NUMBER : BL-C30/2Y-33N

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2002.05.03	1.0	1.0	1.0	1.0	1.0						Initial Released

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BRIGHT LED ELECTRONICS CORP.

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BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

●COMMODITY : LAMP / HOLDER ASSEMBLY

●DEVICE NUMBER : BL-C30/2Y-33N

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●ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta=25°C)

VERSION : 1.0

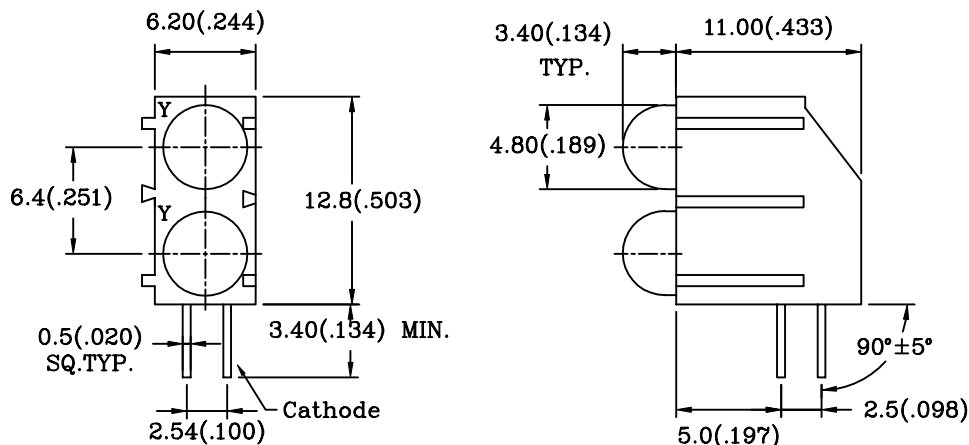
Chip		Lens Appearance	Absolute Maximun Rating				Electro-optical Data (At 20mA)			Viewing Angle 2 θ 1/2 (deg)
Emitted Color	Peak Wave Length λ P(nm)		$\Delta \lambda$ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf(V)		Iv Typ. (mcd)	
							Typ.	Max.		
Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	70.0	40

Remark : Viewing angle is the Off-axis angle at which the luminous intensity is half the axial luminous intensity.

●ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Reverse Voltage	5V
Reverse Current (-Vr=5V)	100 μ A
Operating Temperature Range	-40°C ~ 85°C
Storage Temperature Range	-40°C ~ 100°C
Lead Soldering Temperature	260°C For 5 Seconds

●PACKAGE DIMENSIONS



NOTES: 1.All dimensions are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.

3.Lead spacing is measured where the leads emerge from the package.

4.Specifications are subject to change without notice.

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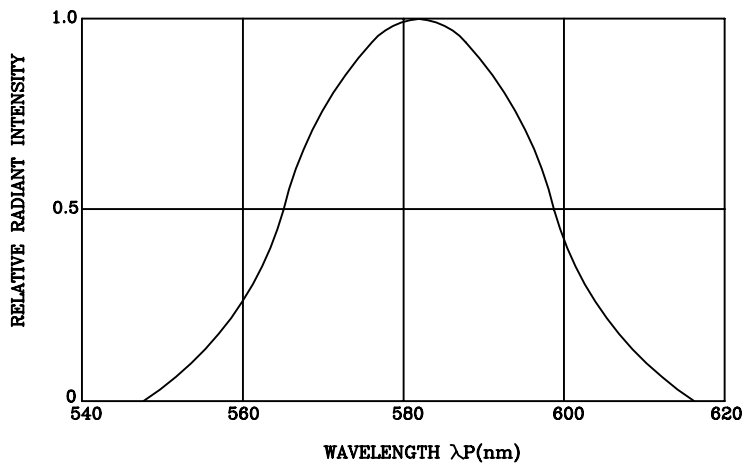
LED LAMPS SPECIFICATION

- COMMODITY: LAMP/HOLDER ASSEMBLY
- DEVICE NUMBER: BL-C30/2Y-33N
- ELECTRICAL AND OPTICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$)

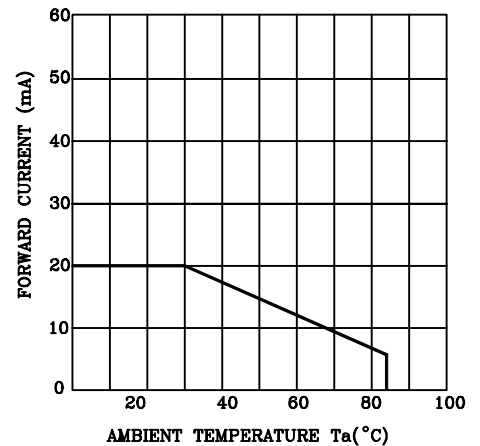
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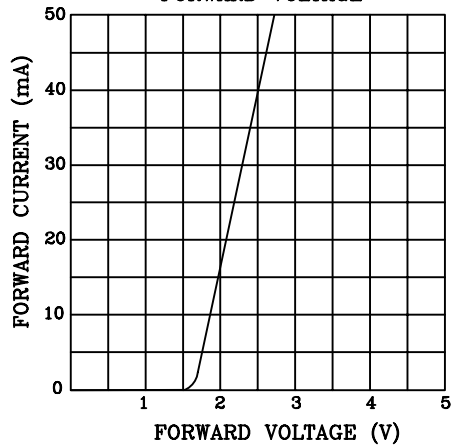
SPECTRAL DISTRIBUTION



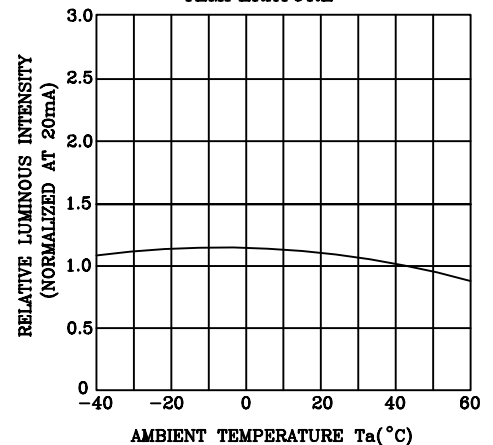
FORWARD CURRENT
DERATING CURVE



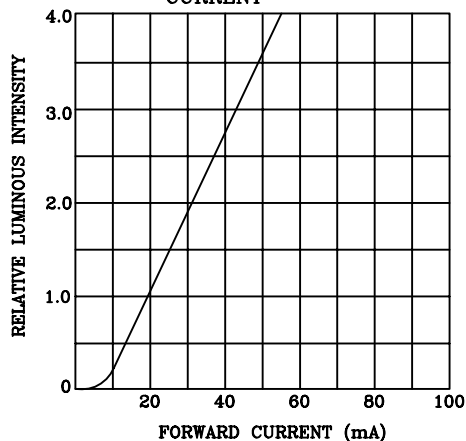
FORWARD CURRENT VS.
FORWARD VOLTAGE



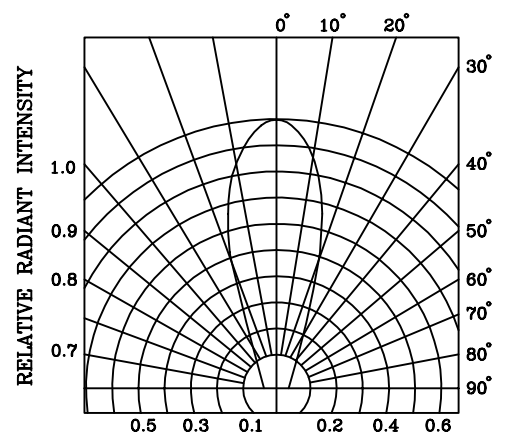
RELATIVE LUMINOUS
INTENSITY VS. AMBIENT
TEMPERATURE



RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



RADIATION DIAGRAM



BRIGHT LED ELECTRONICS CORP.

LAMP/HOLDER ASSEMBLY SPECIFICATION

RELIABILITY TEST

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Classification	Test Item	Reference Standard	Test Conditions	Result
Endurance Test	Operation Life	MIL-STD-750:1026 MIL-STD-883:1005 JIS C 7021 :B-1	Connect with a power $I_f=30\text{mA}$ T_a =Under room temperature Test time=1,000hrs	0/50
	High Temperature High Humidity Storage	MIL-STD-202:103B JIS C 7021 :B-11	$T_a=85^{\circ}\text{C}\pm 5^{\circ}\text{C}$ RH=90%-95% Test time=1,000hrs	0/50
	High Temperature Storage	MIL-STD-883:1008 JIS C 7021 :B-10	High $T_a=105^{\circ}\text{C}\pm 5^{\circ}\text{C}$ Test time=1,000hrs	0/50
	Low Temperature Storage	JIS-C-7021 :B-12	Low $T_a=-55^{\circ}\text{C}\pm 5^{\circ}\text{C}$ Test time=1,000hrs	0/50
Environmental Test	Temperature Cycling	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021 :A-4	$-35^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim 85^{\circ}\text{C} \sim 25^{\circ}\text{C}$ 30min 5min 30min 5min Test Time=10cycle	0/50
	Thermal Shock	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011	$105^{\circ}\text{C}\pm 5^{\circ}\text{C} \sim -55^{\circ}\text{C}\pm 5^{\circ}\text{C}$ 10min 10min Test Time=10cycle	0/50
	Solder Resistance	MIL-STD-202:201A MIL-STD-750:2031 JIS C 7021 :A-1	$T_{\text{sol}}=260\pm 5^{\circ}\text{C}$ Dwell Time=10 $\pm$ 1sec.	0/20
	Solderability	MIL-STD-202:208D MIL-STD-750:2026 MIL-STD-883:2003 JIS C 7021 :A-2	$T_{\text{sol}}=230\pm 5^{\circ}\text{C}$ Dwell Time=5 $\pm$ 1sec.	0/20
	Lead Bending Stress	MIL-STD-750:2036 JIS C 7021 :A-11	0 $^{\circ}$ ~90 $^{\circ}$ ~0 $^{\circ}$ bend , 3 cycles Weight 250g	0/20

JUDGMENT CRITERIA OF FAILURE FOR THE RELIABILITY

Measuring items	Symbol	Measuring conditions	Judgement criteria for failure
Forward voltage	VF	$I_F=20\text{mA}$	Over $U_x1.2$
Reverse current	IR	$V_R=5\text{V}$	Over U_x2
Liminous intensity	IV	$I_F=20\text{mA}$	Below $S_x0.5$

Note: 1.U means the upper limit of specified characteristics. S means initial value.

2.Measurment shall be taken between 2 hours and after the test pieces have been returned to normal ambient conditions after completion of each test.

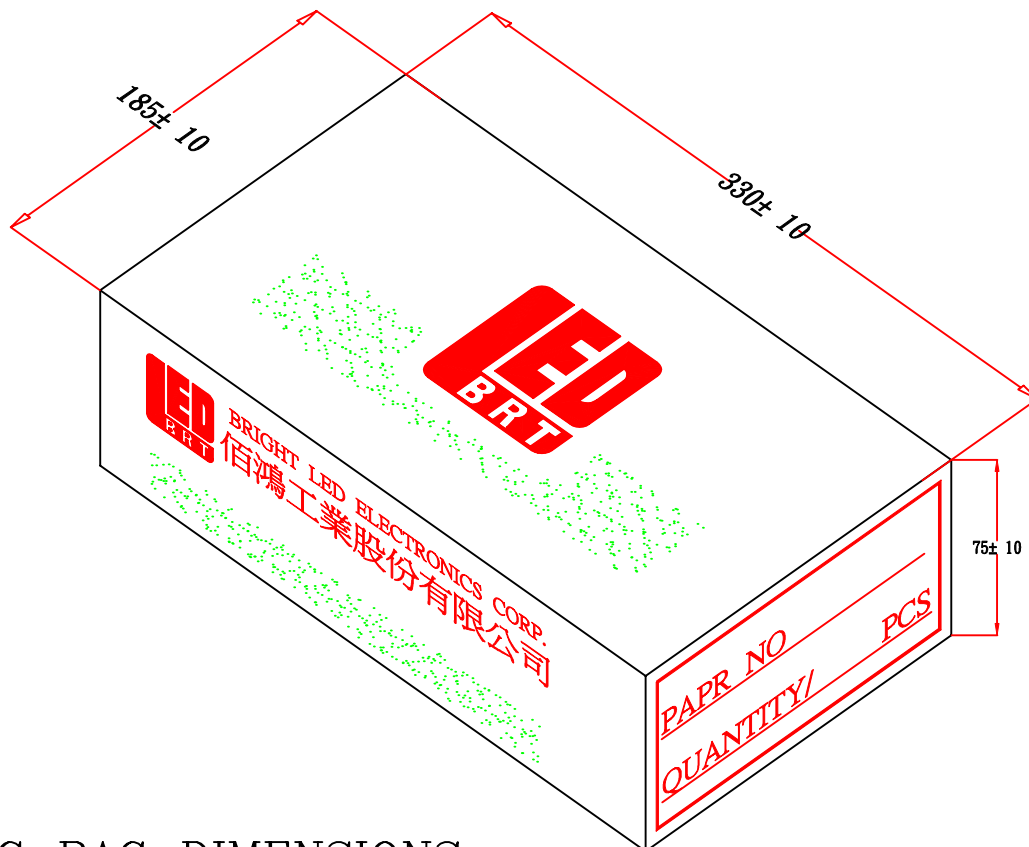
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PACKAGING DIMMENSIONS

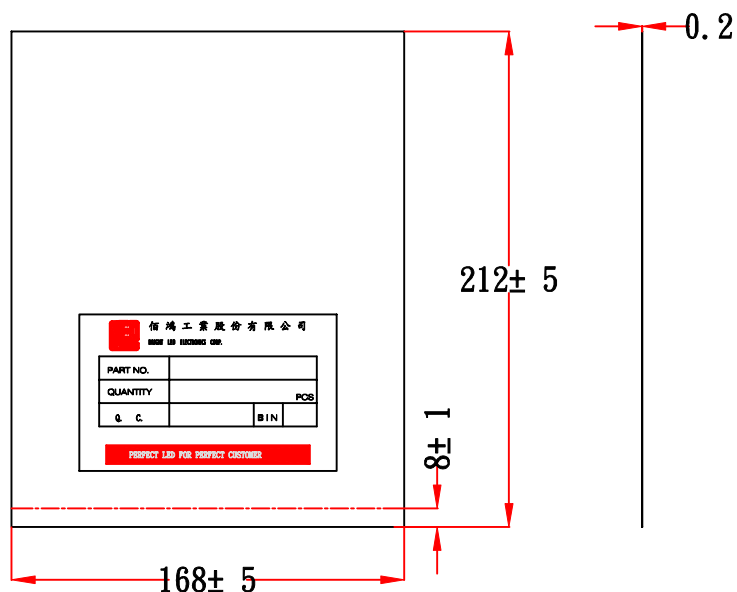
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PACKAGING BOX DIMENSIONS



PACKAGING BAG DIMENSIONS



NOTES:

1. 250 PCS PER BAG, 2. 5K PCS PER BOX
2. ALL Dimensions are in millimeters(inches).
3. Specifications are subject to change without notice.