

BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

●COMMODITY : T-1 Standard 1.0”Lead, 3 ϕ

PAGE: 2

●DEVICE NUMBER : BL-B3141-AA-AV

VERSION : 1.0

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

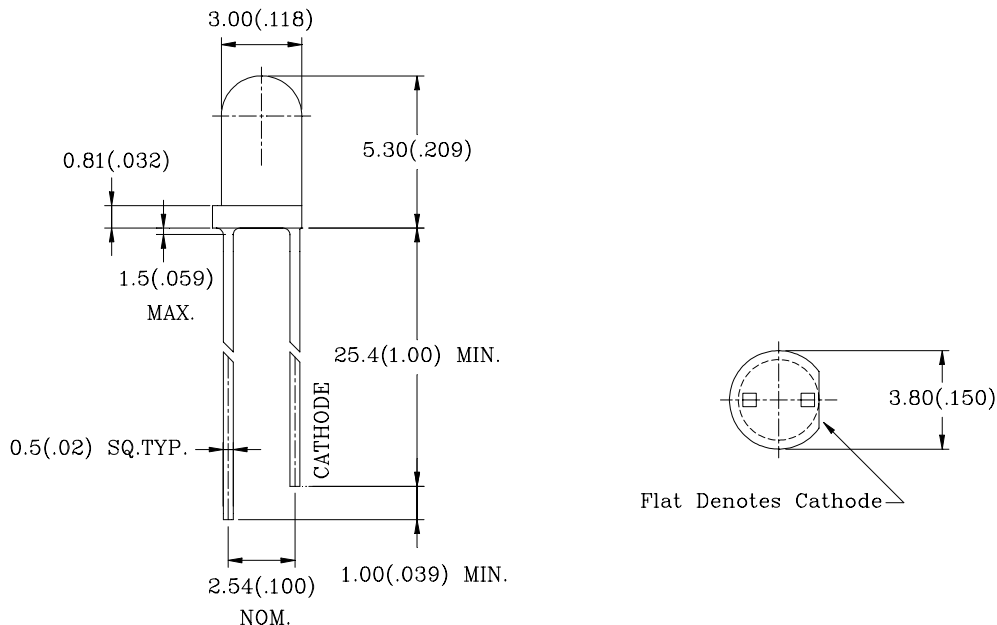
Chip		Lens Appearance	Absolute Maximum Rating				Electro-optical Data (At 20mA)			Viewing Angle 2 θ 1/2 (deg)
Emitted Color	Peak Wave Length λ P(nm)		$\Delta \lambda$ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf(V)		Iv Typ. (mcd)	
							Typ.	Max.		
Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30	35

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 (V _R =5V)	100 μ A
Operating Temperature Range	-40°C ~ 80°C
Storage Temperature Range	-40°C ~ 85°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.

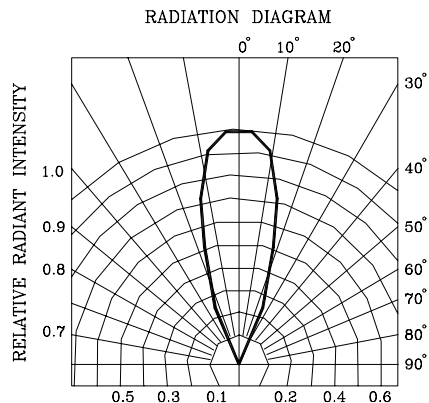
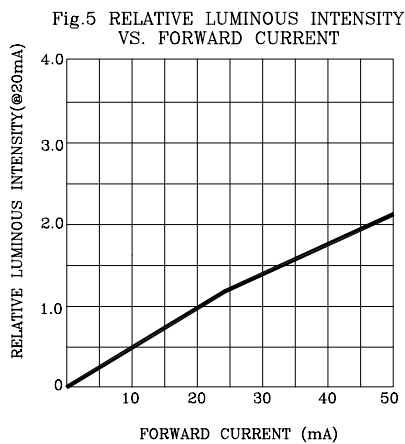
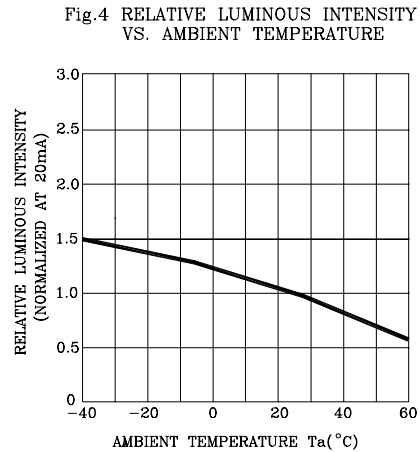
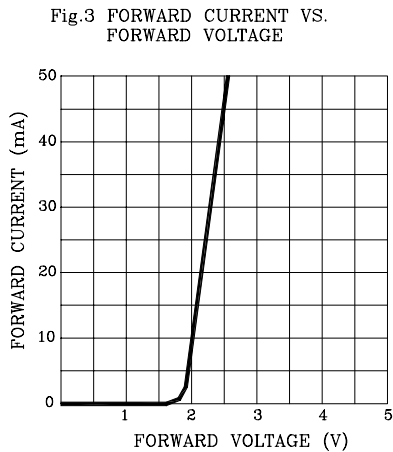
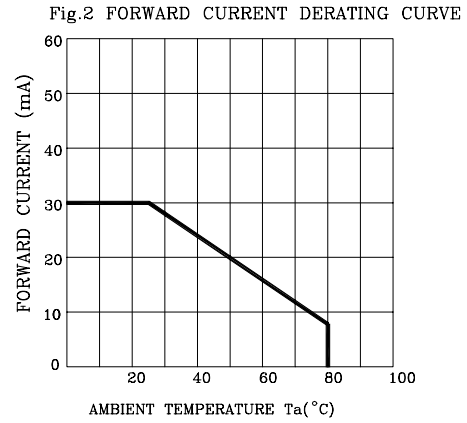
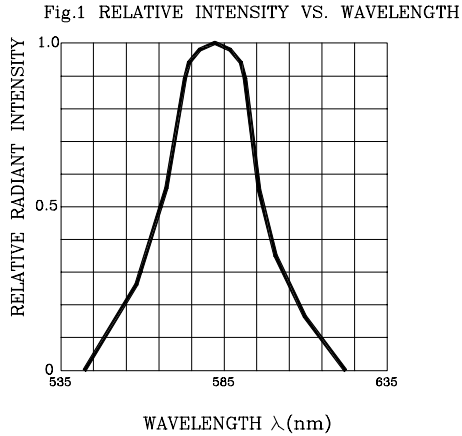
4.Specifications are subject to change without notice.

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- DEVICE NUMBER : BL-B3141-AA-AV
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PAGE: 3
VERSION : 1.0



BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

RELIABILITY TEST

PAGE: 4
VERSION : 1.0

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 $I_f=20\text{mA}$ T_a =Under room temperature Test time=1,000hrs	0/100
	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=240hrs	0/100
	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	0/100
	Low Temperature Storage	JIS-C-7021 :B-12	Low $T_a=-55^\circ\text{C} \pm 5^\circ\text{C}$ Test time=1,000hrs	0/100
Environmental Test	Temperature Cycling	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021 :A-4	$-55^\circ\text{C} \sim 25^\circ\text{C} \sim 105^\circ\text{C} \sim 25^\circ\text{C}$ 30min 5min 30min 5min Test Time=10cycle	0/100
	Thermal Shock	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011	$-55^\circ\text{C} \pm 5^\circ\text{C} \sim 105^\circ\text{C} \pm 5^\circ\text{C}$ 10min 10min Test Time=10cycle	0/100
	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= 5 ± 1 sec.	0/50
	Solder ability	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 ± 1 sec.	0/50
	Lead Bending Stress	MIL-STD-750:2036 JIS C 7021 :A-11	$0^\circ \sim 90^\circ \sim 0^\circ$ bend , 3 cycles Weight 250g	0/50

JUDGMENT CRITERIA OF FAILURE FOR THE RELIABILITY

Measuring items	Symbol	Measuring conditions	Judgement criteria for failure
Forward voltage	V_F	$I_f=20\text{mA}$	Over $U_x1.2$
Reverse current	I_r	$V_r=5\text{V}$	Over U_x2
Luminous intensity	I_v	$I_f=20\text{mA}$	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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LED LAMPS SPECIFICATION Intensity And Color, V_F Bin Limits

● COMMODITY : T-1 Standard 1.0"Lead, 3 ϕ

PAGE: 5

● DEVICE NUMBER : BL-B3141-AA-AV

REVISION: 1.1

● Intensity Bin Limits (At 20mA)

BIN CODE	Min. (mcd)	Max. (mcd)
L	18.5	28.0
M	28.0	42.0
N	42.0	63.0
P	63.0	94.0
Q	94.0	140.0

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

● Color Bin Limits (At 20mA)

BIN CODE	Min. (nm)	Max. (nm)
2	582	584
3	584	586
4	586	588
5	588	590
6	590	592
7	592	594

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

● V_F Bin Limits (At 20mA)

BIN CODE	Min.(v)	Max.(v)
1	1.8	1.9
2	1.9	2.0
3	2.0	2.1
4	2.1	2.2
5	2.2	2.3
6	2.3	2.4
7	2.4	2.5
8	2.5	2.6

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

● BIN :
 ↑ ↑ ↑
 Vf BIN CODE
 Color BIN CODE
 Intensity BIN CODE

Notes:

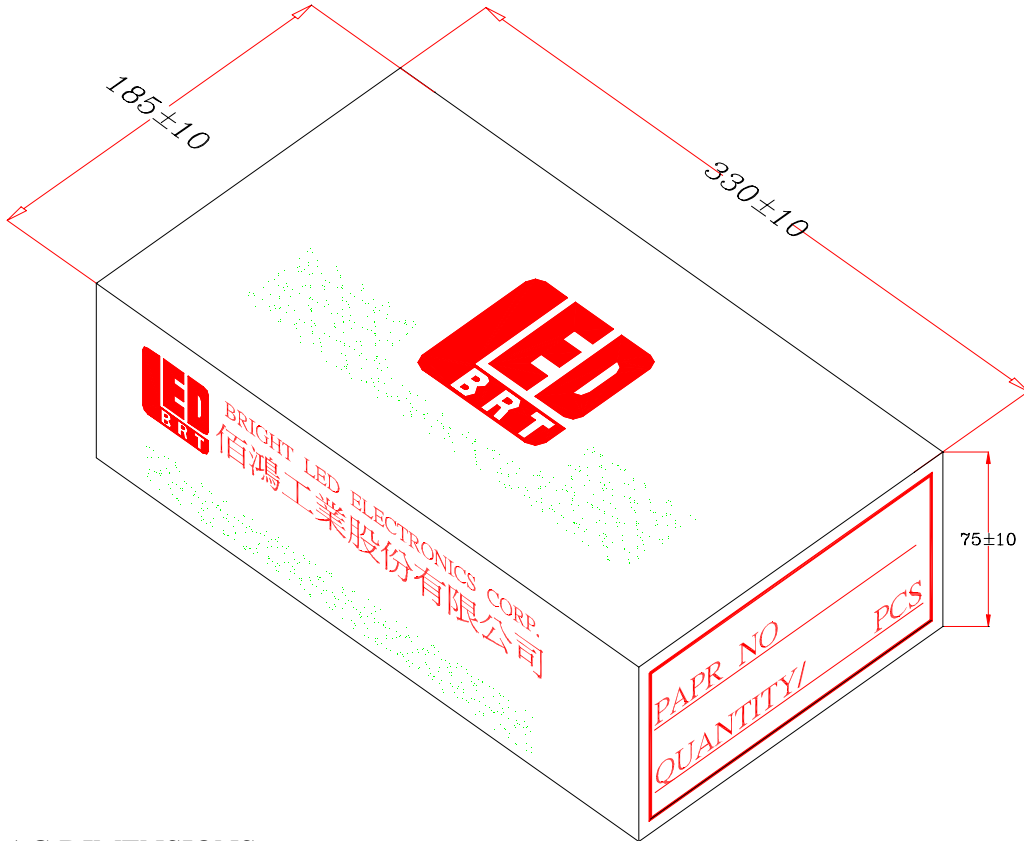
1. Bin categories are established for classification of products.
Products may not be available in all bin categories.

BRIGHT LED ELECTRONICS CORP.

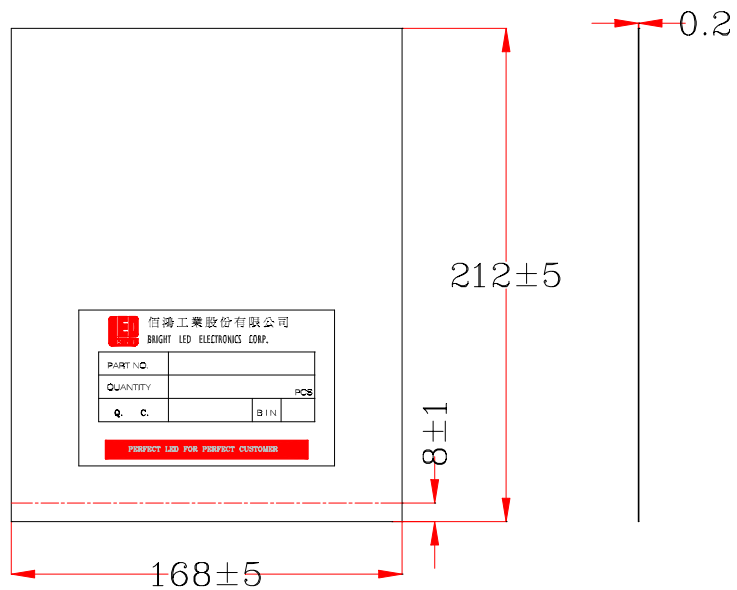
PACKAGING DIMENSIONS

PAGE: 5
VERSION : 1.0

PACKAGING BOX DIMENSIONS:



PACKAGING BAG DIMENSIONS



NOTES:

- 1.1000 pcs per bag, 10k pcs per box.
- 2.All dimensions are in millimeters (inches).
- 3.Specifications are subject to change without notice.