

BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

●COMMODITY : BACKLIGHT LED LAMPS

PAGE: 2

●DEVICE NUMBER : BL-LX13G1

VERSION : 1.0

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

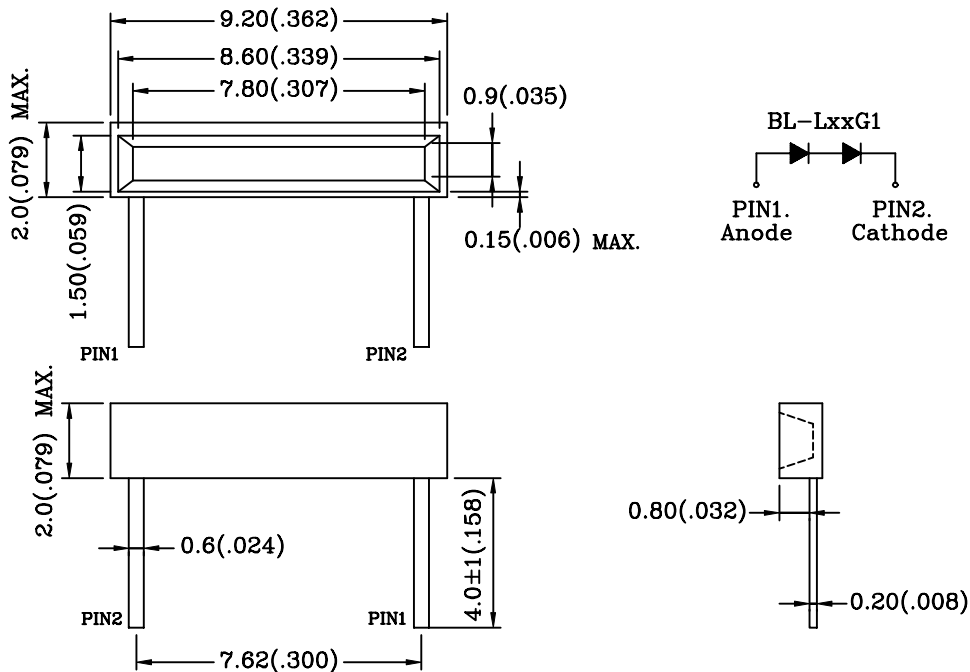
Chip		Lens Appearance	Absolute Maximum Rating				Electro-optical Data (At 20mA)			Viewing Angle 2θ 1/2 (deg)
Emitted Color	Peak Wave Length λ P(nm)		Δ λ (nm)	Pd (mW)	If (mA)	Peak If (mA)	Vf(V)		Iv Typ. (mcd)	
							Typ.	Max.		
Hi-Eff Green	568	Water Clear	30	100	30	150	4.2	5.2	25	120

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)	100μA
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 ± 0.25mm (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.

BRIGHT LED ELECTRONICS CORP.

LED LAMPS SPECIFICATION

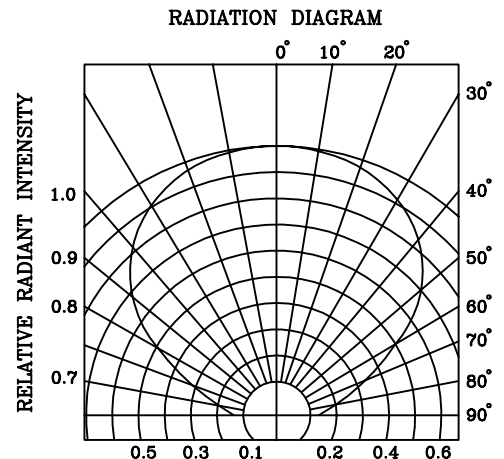
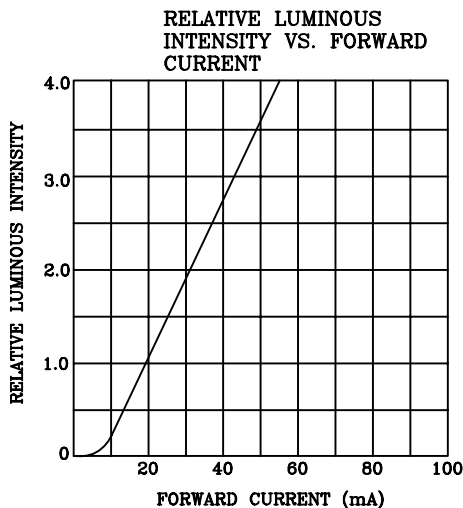
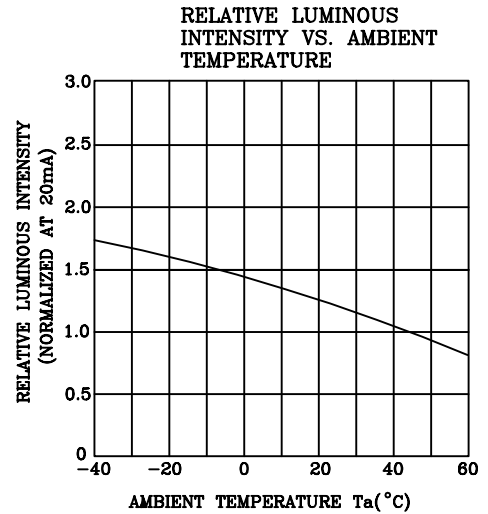
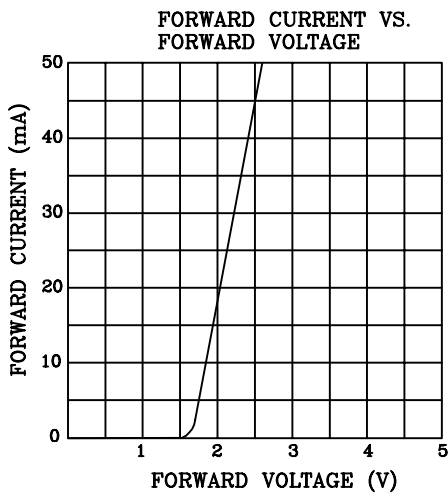
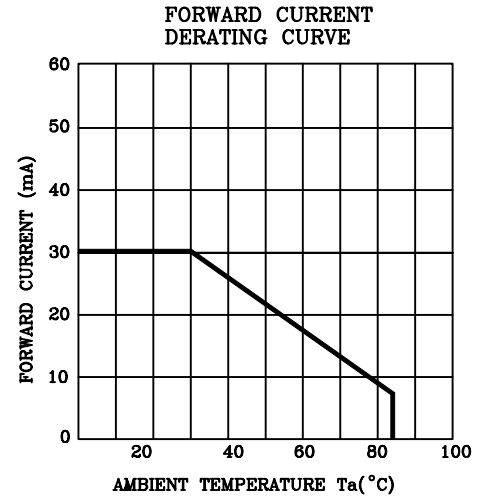
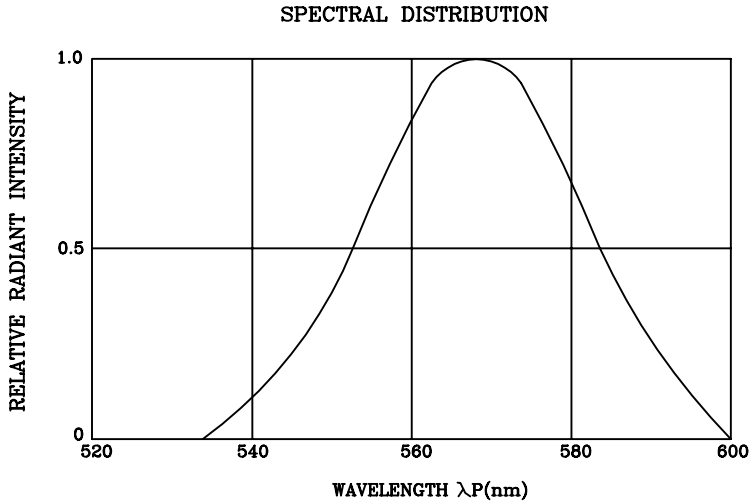
● COMMODITY: BACKLIGHT LED LAMPS

● DEVICE NUMBER: BL-LX13G1

PAGE: 3

● ELECTRICAL AND OPTICAL CHARACTERISTICS($T_a=25\text{ C}$)

REVISION: 1.0



BRIGHT LED ELECTRONICS CORP.

SURFACE MOUNT BLINKING LED LAMP SPECIFICATION

RELIABILITY TEST

PAGE: 4

REVISION: 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	0/20
	High Temperature High Humidity Storage	MIL-STD-202:103B JIS C 7021 :B-11	$T_a=+65^\circ\text{C} \pm 5^\circ\text{C}$ RH=90%-95% Test time=1,000hrs	0/20
	High Temperature Storage	MIL-STD-883:1008 JIS C 7021 :B-10	High $T_a=+85^\circ\text{C} \pm 5^\circ\text{C}$ Test time=1,000hrs	0/20
	Low Temperature Storage	JIS-C-7021 :B-12	Low $T_a=-35^\circ\text{C} \pm 5^\circ\text{C}$ Test time=1,000hrs	0/20
	Temperature Cycling	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021 :A-4	$-35^\circ\text{C} \sim +25^\circ\text{C} \sim +85^\circ\text{C} \sim +25^\circ\text{C}$ 60min 20min 60min 20min Test Time=5cycle	0/20
Environmental Test	Thermal Shock	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011	$+85^\circ\text{C} \pm 5^\circ\text{C} \sim -35^\circ\text{C} \pm 5^\circ\text{C}$ 20min 20min Test Time=10cycle	0/20
	Solder Resistance	MIL-STD-202:201A MIL-STD-750:2031 JIS C 7021 :A-1	Preheating : $140^\circ\text{C} - 160^\circ\text{C}$, within 2 minutes. Operation heating : 235°C (Max.), within 10 seconds.(Max.)	0/20

JUDGMENT CRITERIA OF FAILURE FOR THE RELIABILITY

Measuring items	Symbol	Measuring conditions	Judgement criteria for failure
Forward voltage	V_F (V)	$I_f=20\text{mA}$	Over $U_x1.2$
Reverse current	$I_r(\mu\text{A})$	$V_r=5\text{V}$	Over U_x2
Luminous intensity	I_v (mcd)	$I_f=20\text{mA}$	Below $SX0.5$

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.