

## LED LAMPS SPECIFICATION

TOTAL PAGE: 5
PAGE: 1

REVISION: 1.1

• COMMODITY : 1.0" Lead Tower 1.8  $\phi$ 

● DEVICE NUMBER: BL-S51L8

SHEET DATE	1	2	3	4	5			CONTENTS
2002.07.11	1.0	1.0	1.0	1.0	1.0			Initial Released
2002.09.03	1.1	1.1	-	-	-			Revise Size

TOTAL PAGE	5								

# 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	DRAWN
郭	余
2002.09.03	2002.09.03
偉 斌	愛 萍

### LED LAMPS SPECIFICATION

**©**COMMODITY : 1.0"Lead Tower 1.8  $\phi$ 

●DEVICE NUMBER: BL-S51L8 PAGE: 2

VERSION: 1.1

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

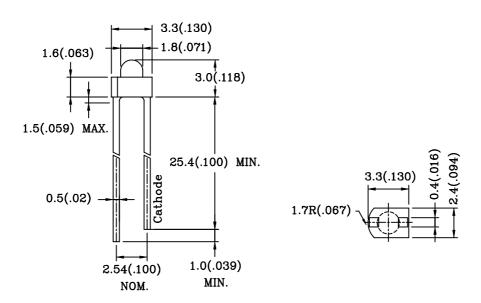
Chip			A	bsolute 1	Maximu	m	E	Viewing		
Peak		Lens		Rat	ting		D	Angle		
Emitted Color	Wave Length	A		Pd	If	Peak	Vf(V)		Iv Typ.	$2\theta 1/2$ (deg)
	$\lambda P(nm)$		(nm)	(mW)	(mA)	If(mA)	Тур.	Max.	(mcd)	(deg)
Bright Red	700	Red Diffused	90	40	15	50	2.2	2.6	1.0	70

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)	
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).

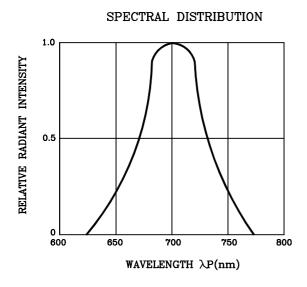
- 2. Tolerance is  $\pm$  0.25mm (0.01") unless otherwise specified.
- 3.Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

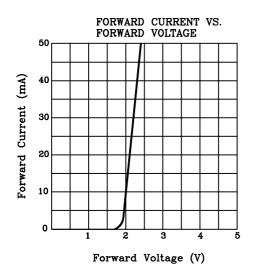
## LED LAMPS SPECIFICATION

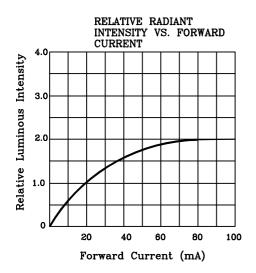
● COMMODITY:1.0" Lead Tower 1.8¢

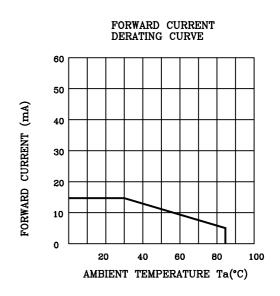
● DEVICE NUMBER: BL—S51L8 PAGE:

● ELECTRICAL AND OPTICAL CHARACTERISTICS(Ta=25°C) REVISION: 1.0

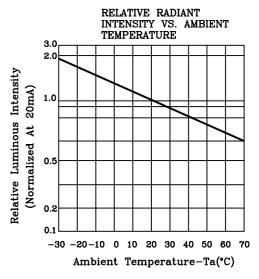


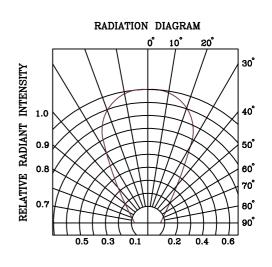






3





## LED LAMPS SPECICATION

**RELIABILITY TEST** 

REVISION: 1.0

4

PAGE:

Classification	Test Item	Reference Standard	Test Conditions	Result
	Operation Life	MIL-STD-750:1026 MIL-STD-883:1005 JIS C 7021 :B-1	Connect with a power If=20mA Ta=Under room temperature Test time=1,000hrs	0/100
Endurance Test	High Temperature High Humidity Storage	MIL-STD-202:103B JIS C 7021 :B-11	Ta=85°C±5°C RH=90%-95% Test time=240hrs	0/100
	High Temperature Storage	MIL-STD-883:1008 JIS C 7021 :B-10	High Ta=105°C±5°C Test time=1,000hrs	0/100
	Low Temperature Storage	JIS-C-7021 :B-12	Low Ta=-55°C±5°C Test time=1,000hrs	0/100
	Temperature Cycling	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021 :A-4	-55°C ~ 25°C ~ 105°C ~ 25°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°C±5°C ~ 105°C±5°C 10min 10min Test Time=10cycle	0/100
Environmental Test	Solder Resistance	MIL-STD-202:201A MIL-STD-750:2031 JIS C 7021 :A-1	T.sol=260±5°C Dwell Time=5±1sec.	0/50
	Solder ability	MIL-STD-202:208D MIL-STD-750:2026 MIL-STD-883:2003 JIS C 7021 :A-2	T.sol=230±5°C Dwell Time=5±1sec.	0/50
	Lead Bending Stress	MIL-STD-750:2036 JIS C 7021 :A-11	0°~90°~0°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	$ m V_F$	If=20mA	Over Ux1.2
Reverse current	Ir	Vr=5V	Over Ux2
Luminous intensity	Iv	If=20mA	Below Sx0.5

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

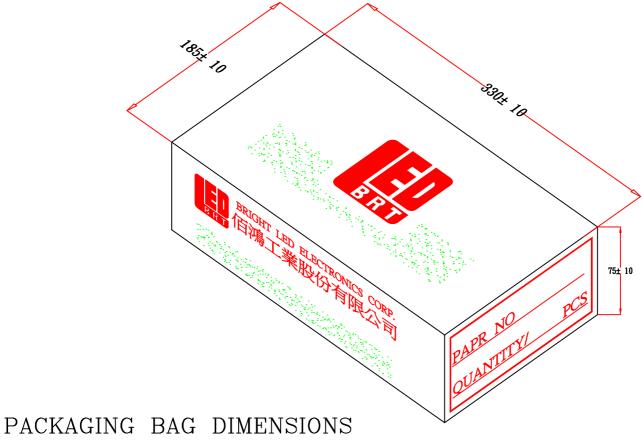
2.Measurment shall be taken between 2 hours and after the test pieces have been returned to normal ambient conditions after completion of each test.

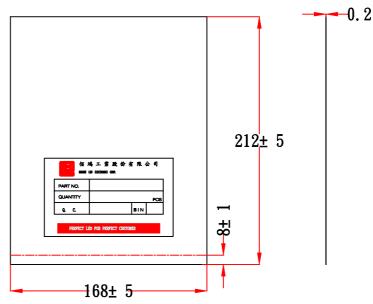
# PACKAGING DIMMENSIONS

PAGE:

REVISION: 1.0

# PACKAGING BOX DIMENSIONS





## NOTES:

- 1. 1000PCS PER BAG, 10K PCS PER BOX
- 2. ALL Dimensions are in millimeters(inches).
- 3. Specifications are subject to change without notice.