

# BRIGHT LED ELECTRONICS CORP.

## LED LAMPS SPECIFICATION

● COMMODITY : T-1 Standard 1.0"Lead, 5  $\phi$

● DEVICE NUMBER : BL-BJ73V4V

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

VERSION : 1.1

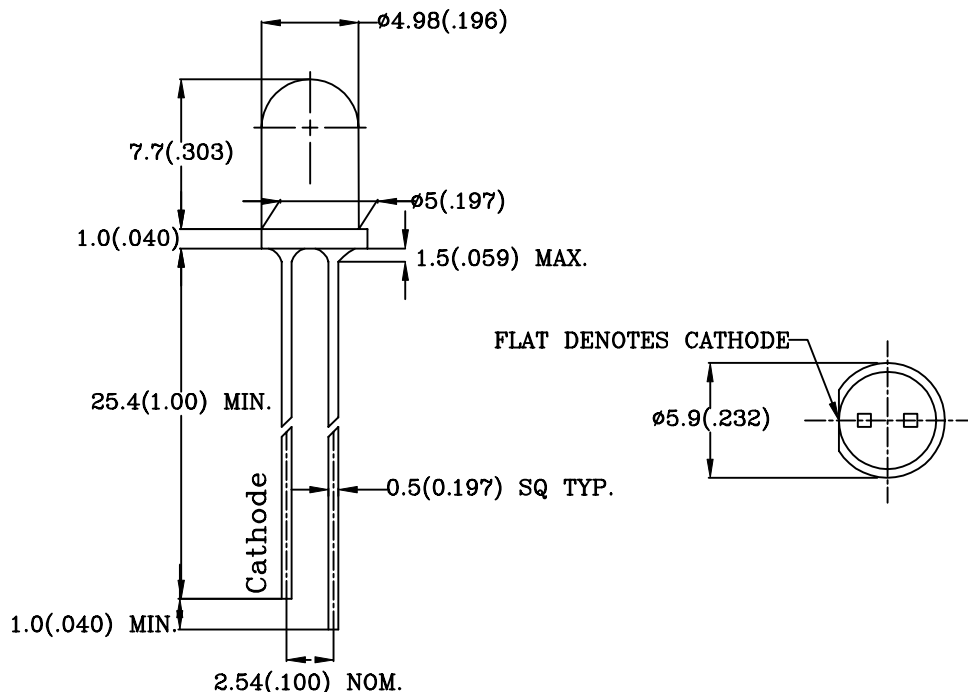
Chip		Lens Appearance	Absolute Maximum Rating				Electro-optical Data (At 20mA)				Viewing Angle 2 $\theta$ 1/2 (deg)
Emitted Color	Peak Wave Length $\lambda$ P(nm)		$\Delta \lambda$ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf(V)		Iv (mcd)		
							Typ.	Max.	Min.	Typ.	
Super Orange	630	Water Clear	17	100	30	150	2.2	2.6	1600	3200	15 $\pm$ 3

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 $\mu$ 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  $\pm 0.25$ 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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REVISION: 1.0

SPECTRAL DISTRIBUTION

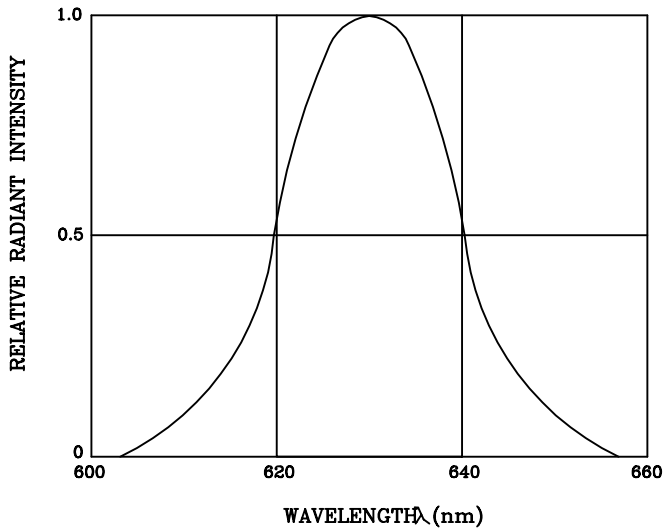
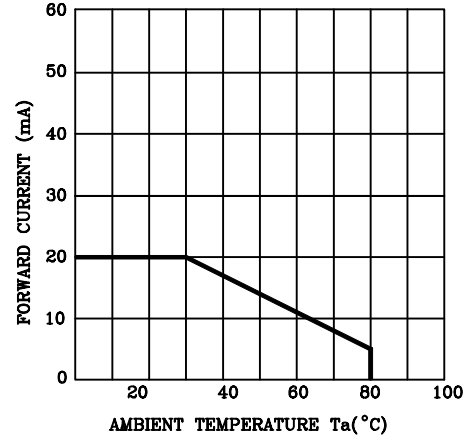
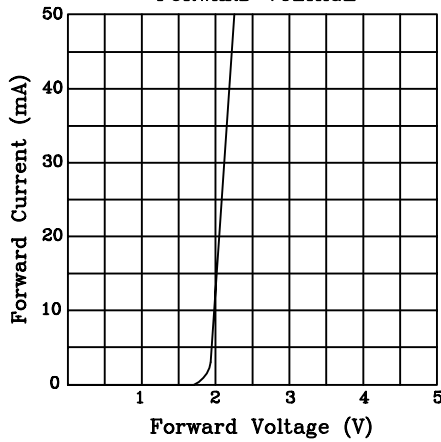


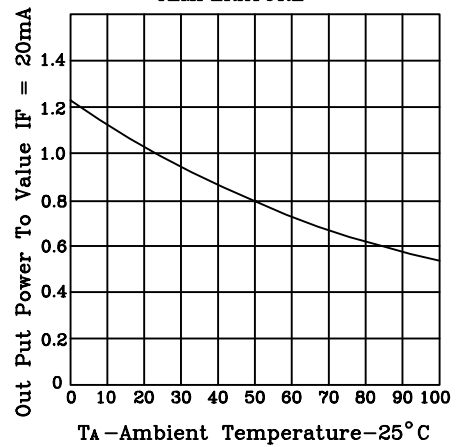
Fig. 2 FORWARD CURRENT DERATING CURVE



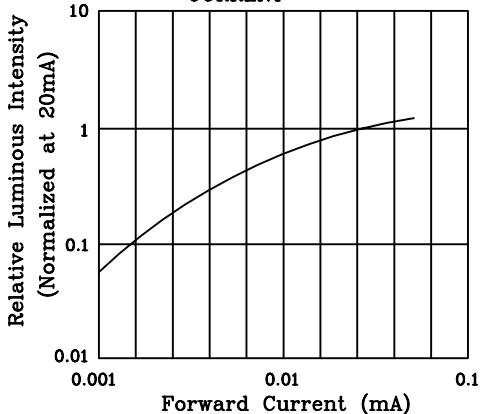
FORWARD CURRENT VS. FORWARD VOLTAGE



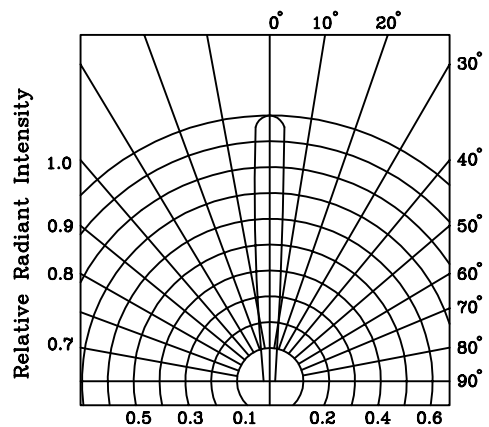
RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE



RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT



RADIATION DIAGRAM



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## LED LAMP 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 If=30mA Ta=Under room temperature Test time=1,000hrs	0/100
	High Temperature High Humidity Storage	MIL-STD-202:103B JIS C 7021 :B-11	Ta=85°C±5°C RH=90%-95% Test time=1,000hrs	0/100
	High Temperature Storage	MIL-STD-883:1008 JIS C 7021 :B-10	High Ta=85°C±5°C Test time=1,000hrs	0/100
	Low Temperature Storage	JIS-C-7021 :B-12	Low Ta=-35°C±5°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	-35°C ~ 25°C ~ 85°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	85°C±5°C ~ -35°C±5°C 10min 10min Test Time=10cycle	0/100
	Solder Resistance	MIL-STD-202:201A MIL-STD-750:2031 JIS C 7021 :A-1	T.sol=260±5°C Dwell Time=10±1sec.	0/50
	Solderability	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	VF	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.

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## LED LAMPS SPECIFICATION Intensity And Color Bin Limits

● COMMODITY : T-1 3/4 Standard 1.0"Lead, 5  $\phi$

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● DEVICE NUMBER : BL-BJ73V4V

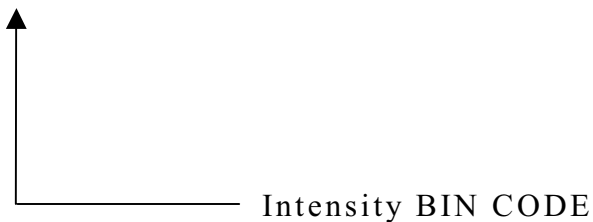
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● Intensity Bin Limits (At 20mA)

<b>BIN CODE</b>	<b>Min. (mcd)</b>	<b>Max. (mcd)</b>
X	1600	2400
Y	2400	3700
Z	3700	5550
ZA	5550	8325

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

● BIN : x



Notes:

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