



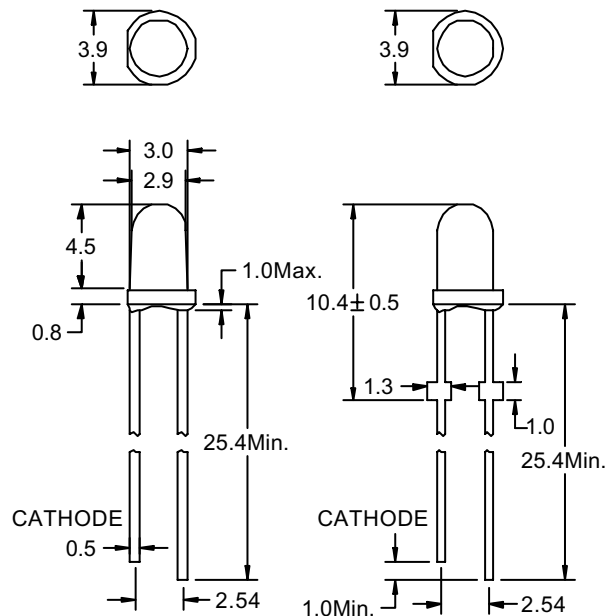
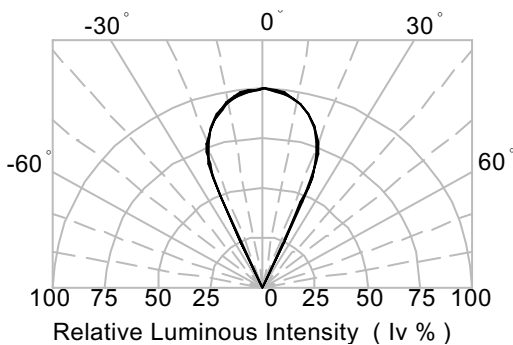
## BVU-3T0RD1

## PACKAGE CONFIGURATION

### DESCRIPTION

Dice Material : AlGaAs/GaAs Red  
Light Color : Red Color  
Lens Color : Red Diffused  
Stand-Off P/N : BVU-3T0RD1 R

### RADIATION PATTERN



Tolerance  $\pm 0.25$  mm

### ABSOLUTE MAXIMUM RATINGS AT $T_a = 25^\circ\text{C}$

PARAMETER	MAX.	UNIT
Power Dissipation	100	mW
Continuous Forward Current	40	mA
Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width )	200	mA
Reverse Voltage	5	V
Derating Linear From $50^\circ\text{C}$	0.4	mA/ $^\circ\text{C}$
Operating Temperature Range	$-40^\circ\text{C}$ to $+100^\circ\text{C}$	
Storage Temperature Range	$-40^\circ\text{C}$ to $+100^\circ\text{C}$	
Lead Solder Temperature 1.6 mm Below Package	$260^\circ\text{C}$ for 5 seconds	

### ELECTRICAL / OPTICAL CHARACTERISTICS AT $T_a = 25^\circ\text{C}$

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 20 mA		1.9	2.2	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 5V			100	$\mu\text{A}$
$\lambda_p$	Peak Emission Wavelength	I <sub>F</sub> = 20 mA		660		nm
$\lambda_d$	Dominant Wavelength	I <sub>F</sub> = 20 mA		643		nm
$2\theta_{1/2}$	Viewing Angle	I <sub>F</sub> = 20 mA		45		Deg
I <sub>V</sub>	Luminous Intensity / Bin I 1	I <sub>F</sub> = 20 mA	78		168	mcd
I <sub>V</sub>	Luminous Intensity / Bin I 2	I <sub>F</sub> = 20 mA	168			mcd

\*Bright View reserves the rights to alter specifications and remove availability of products at any time without notice.

\*Dominant Wavelength,  $\lambda_d$  is according to CIE Chromaticity Diagram base on color of lamps.

\* $\theta_{1/2}$  is the off-axis angle where the luminous intensity is one half the on-axis intensity.



### AlGaAs /GaAs Red LED

#### TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current Vs. Forward Voltage

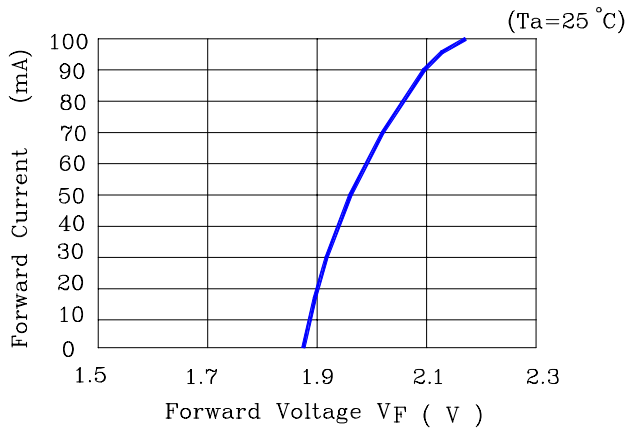


FIG. 2 Relative Intensity Vs. Forward Current

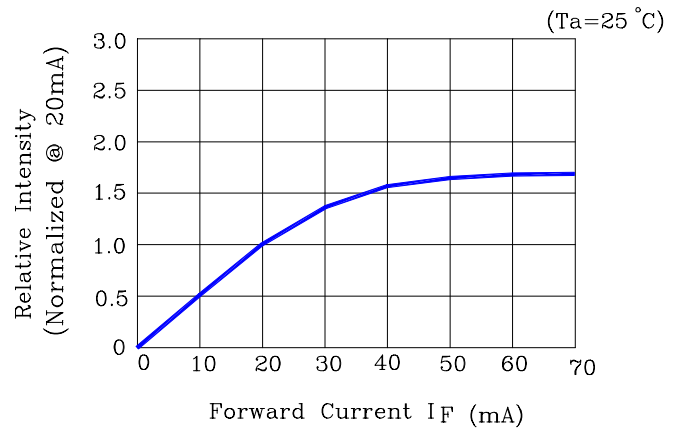


FIG. 3 Forward Voltage VS. Temperature

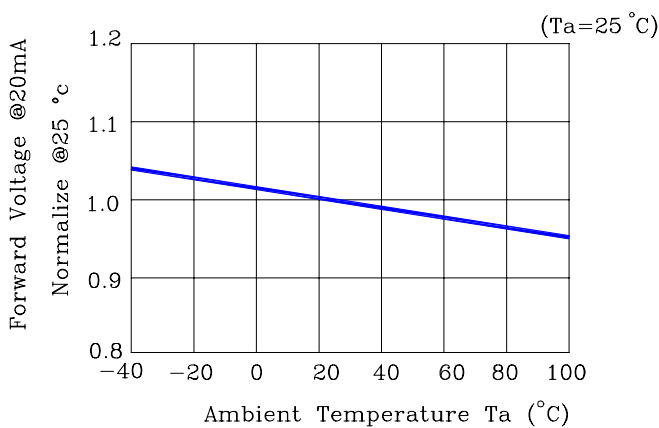


FIG. 4 Relative Intensity vs. Temperature

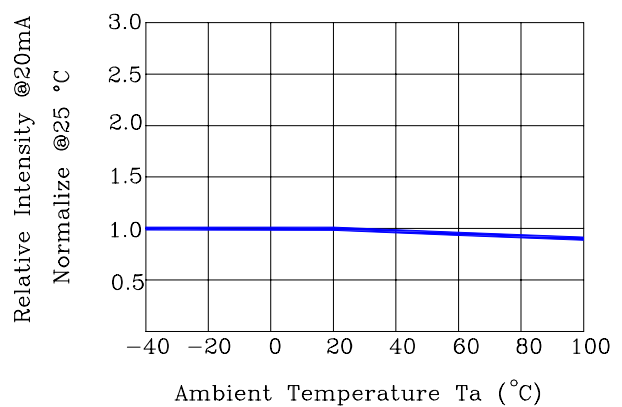


FIG. 5 Relative Intensity vs. Wavelength ( $\lambda_p$ )

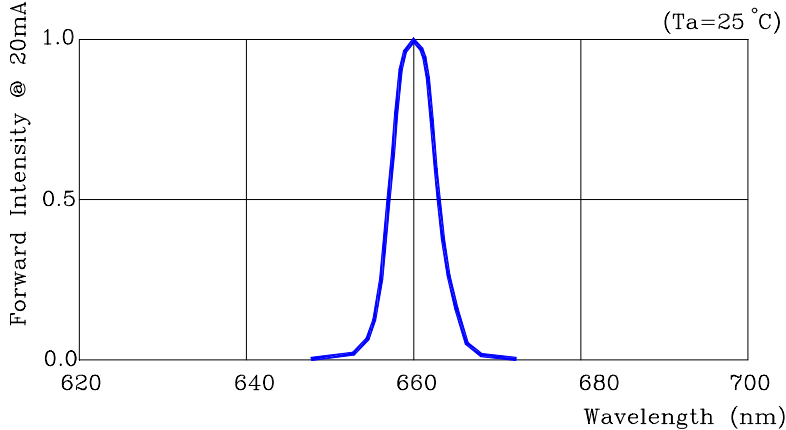
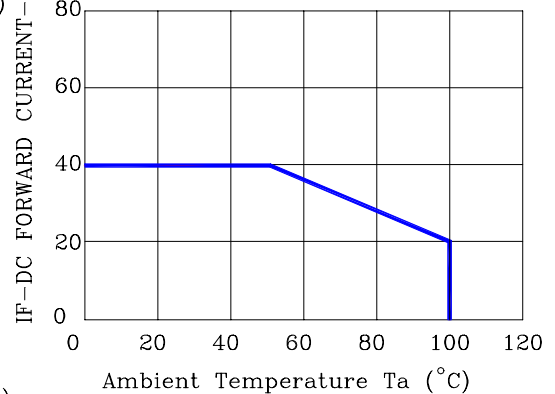
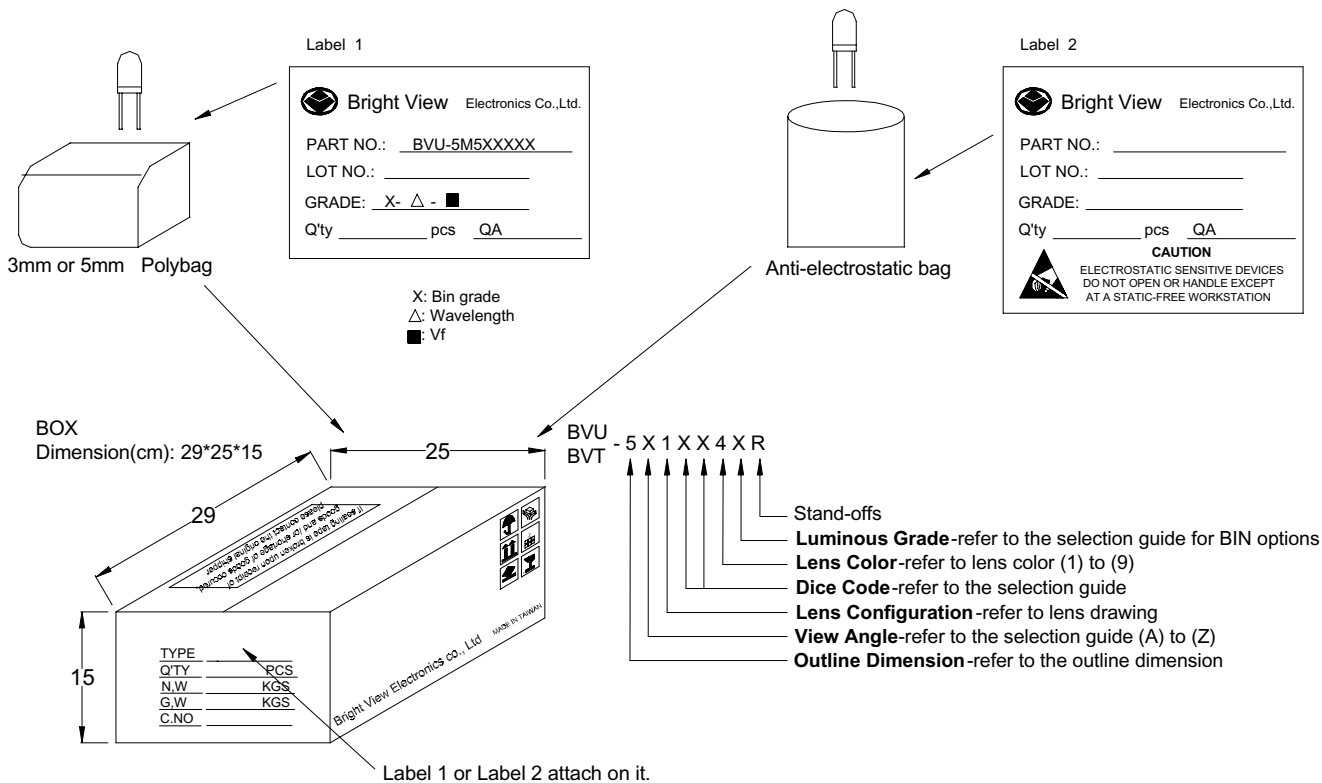
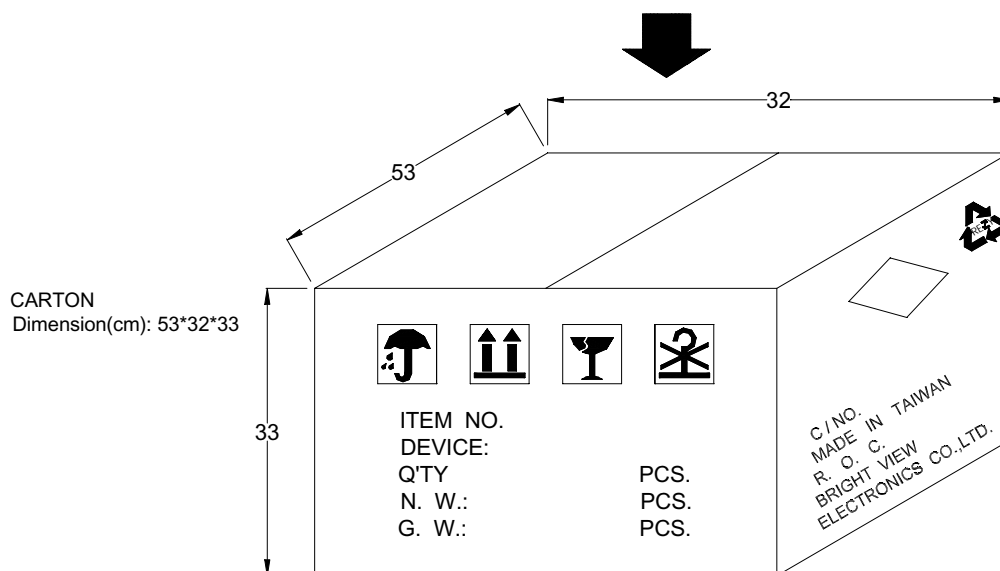


FIG. 6 Maximum Forward Current vs. Ambient Temperature. Derating Based on  $T_{MAX}=130^{\circ}C$





Device	Q'ty / Polybag (pcs)	Polybag / Box A	Fig.
5mm(T-1 3/4)	1000pcs	14 bags	Label 1
3mm(T-1)	1000pcs	20 bags	Label 1
Blue / Green / White	500pcs	18 bags	Label 2



4 Boxes / Carton

5mm : 56,000pcs

3mm : 80,000pcs

Blue / Green / White : 36,000pcs