



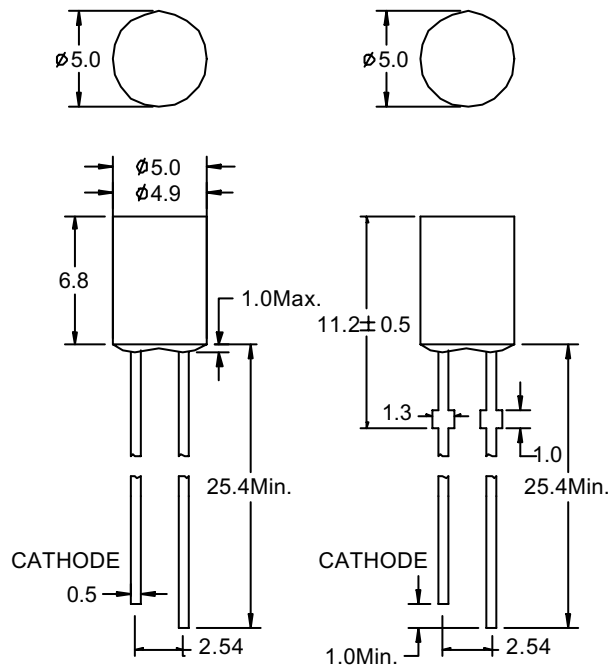
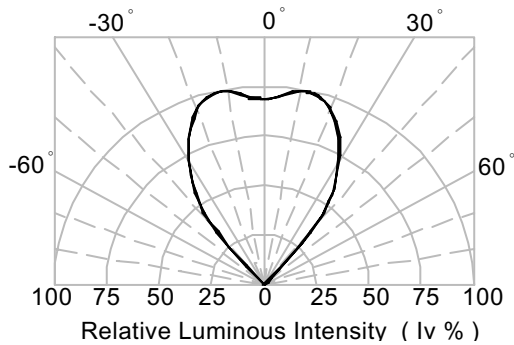
**BVU-5D51QH4**

**PACKAGE CONFIGURATION**

**DESCRIPTION**

Dice Material : AlGaInP/GaAs Orange Red  
Light Color : Orange Red Color  
Lens Color : Water Transparent  
Stand-Off P/N : BVU-5D51QH4 R

**RADIATION PATTERN**



Tolerance ± 0.25 mm

**ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C**

PARAMETER	MAX.	UNIT
Power Dissipation	75	mW
Continuous Forward Current	30	mA
Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width )	160	mA
Reverse Voltage	5	V
Derating Linear From 50 °C	0.4	mA/°C
Operating Temperature Range	-40 °C to + 100 °C	
Storage Temperature Range	-40 °C to + 100 °C	
Lead Solder Temperature 1.6 mm Below Package	260 °C for 5 seconds	

**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 °C**

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 20 mA		1.8	2.4	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 5V			100	μA
λ <sub>p</sub>	Peak Emission Wavelength	I <sub>F</sub> = 20 mA		630		nm
λ <sub>d</sub>	Dominant Wavelength	I <sub>F</sub> = 20 mA		626		nm
2θ <sub>1/2</sub>	Viewing Angle	I <sub>F</sub> = 20 mA		75		Deg

**BIN GRADE LIMITS ( I F = 20 mA ) LUMINOUS INTENSITY / mcd**

Bin	C	D	E	F	G	H
Min.	168	218	280	360	465	600
Max.	218	280	360	465	600	780

Tolerance ± 15% mcd

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

\*Dominant Wavelength, λ<sub>d</sub> is according to CIE Chromaticity Diagram base on color of lamps.

\*θ<sub>1/2</sub> is the off-axis angle where the luminous intensity is one half the on-axis intensity.



### AlGaInP / GaAs LED

### TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current Vs. Forward Voltage

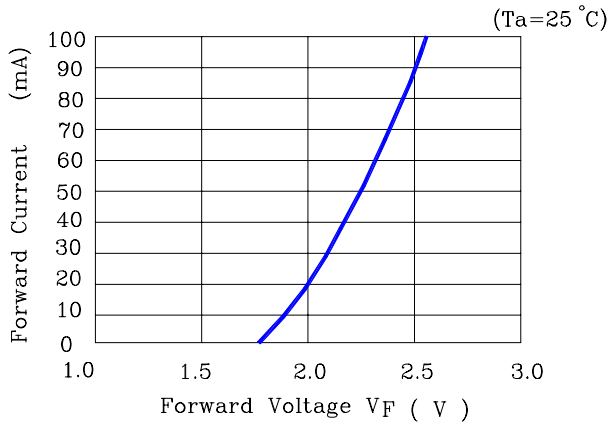


FIG. 2 Relative Intensity Vs. Forward Current

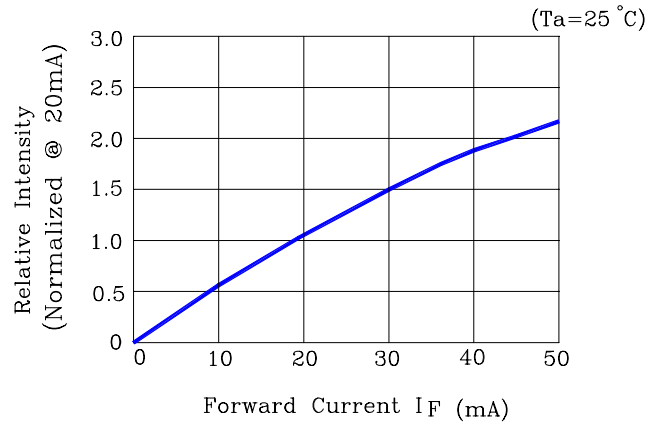


FIG. 3 Forward Voltage VS. Temperature

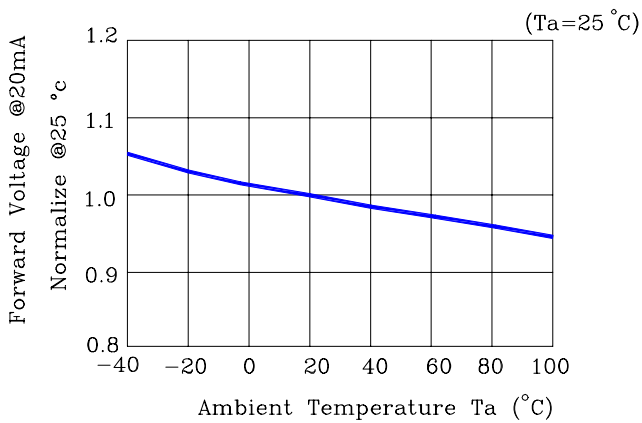


FIG. 4 Relative Intensity vs. Temperature

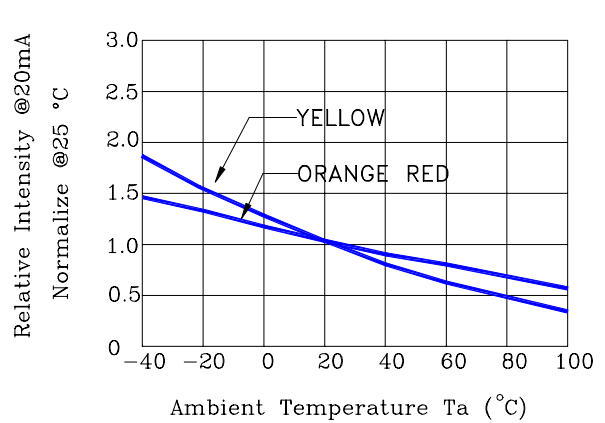


FIG. 5 Relative Intensity vs. Wavelength ( $\lambda_p$ )

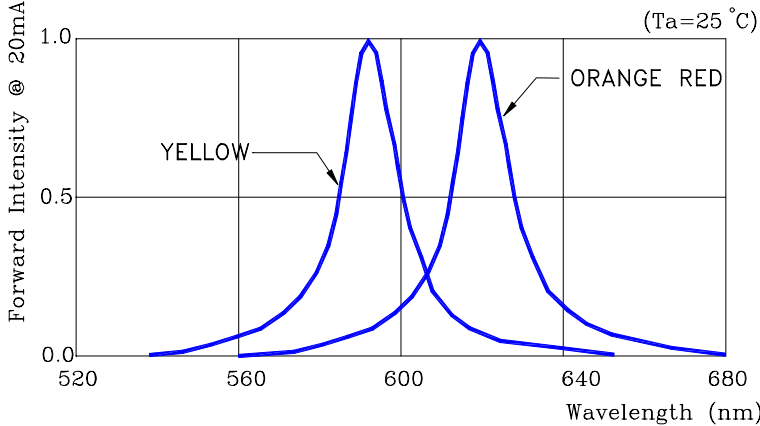
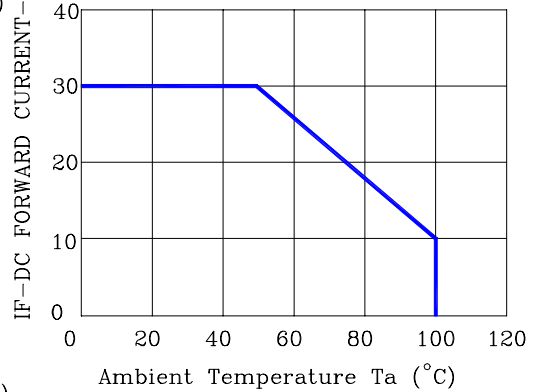
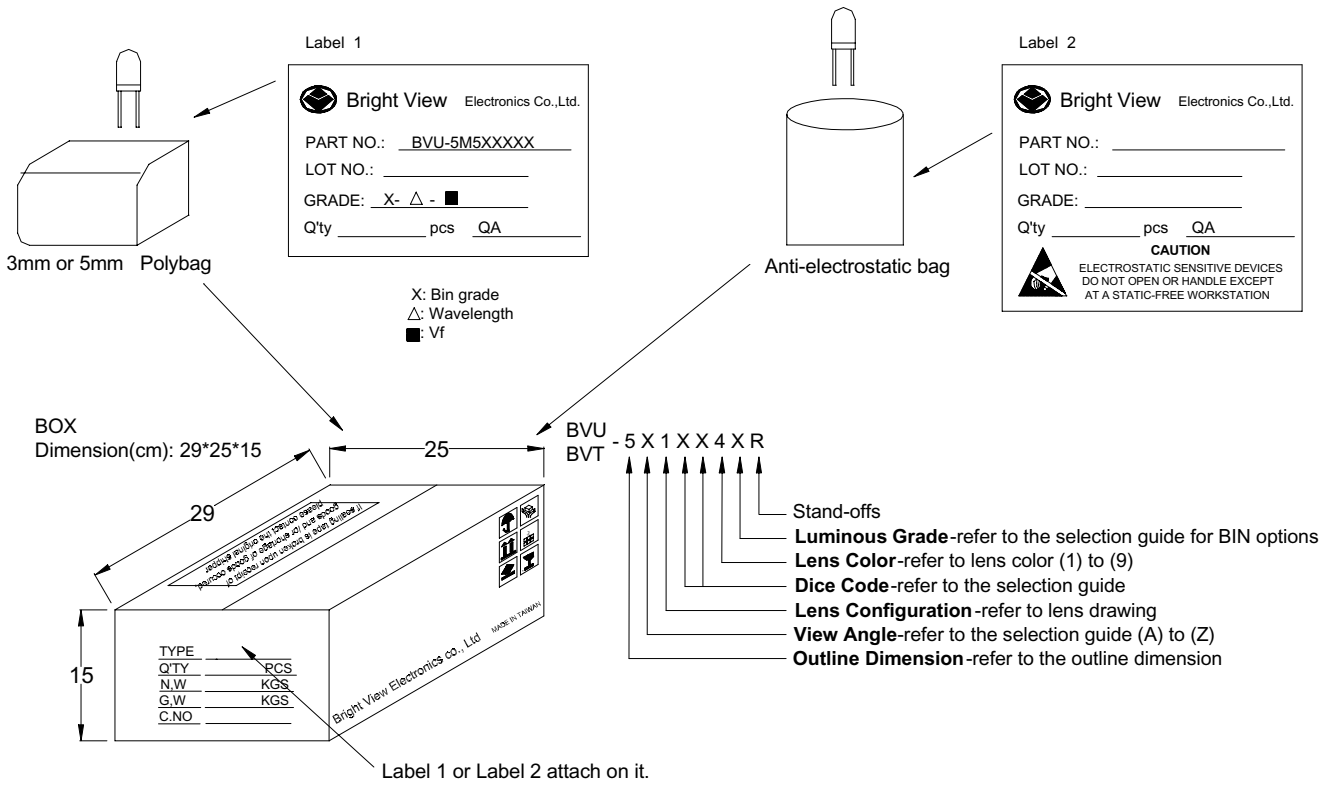
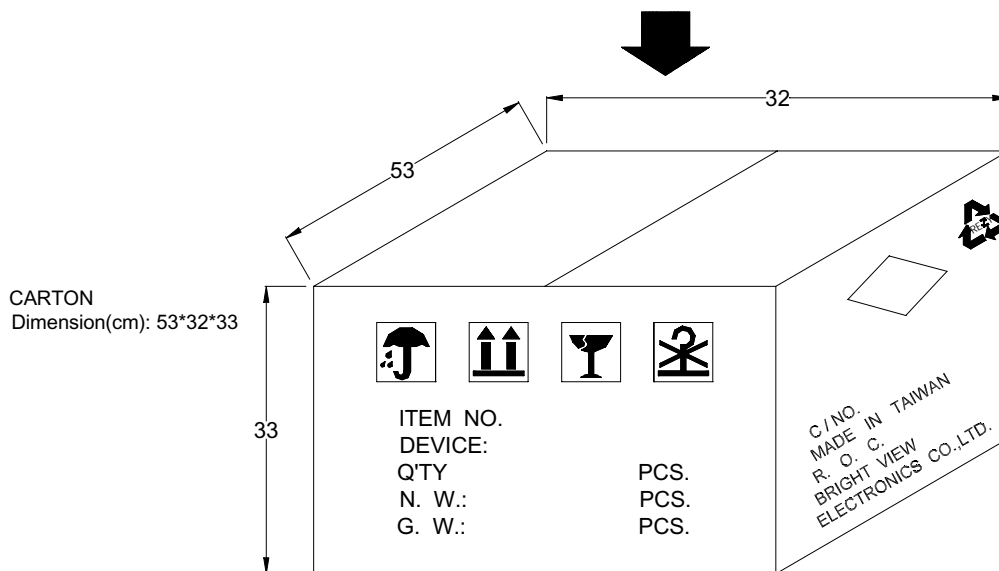


FIG. 6 Maximum Forward Current vs. Ambient Temperature. Derating Based on  $T_{JMAX}=130^{\circ}C$





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