



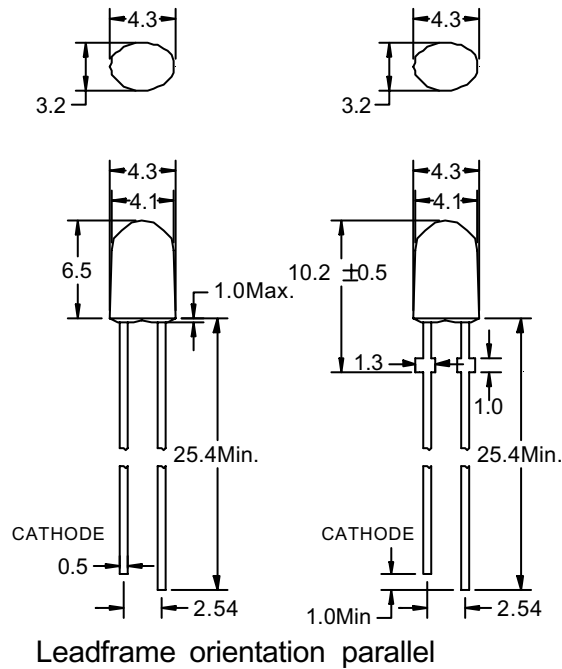
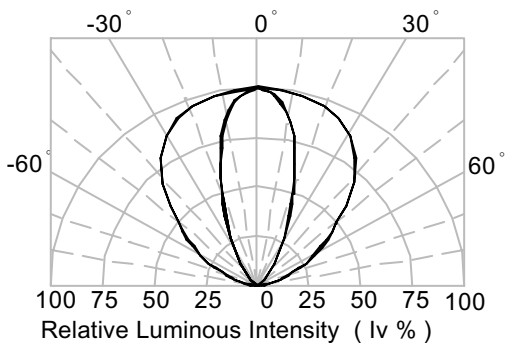
BVU-439QT9

PACKAGE CONFIGURATION

DESCRIPTION

Dice Material : AlInGaP/GaP Orange Red
Light Color : Orange Red Color
Lens Color : Red Tinted Diffused
Stand-Off P/N : BVU-439QT9 R

RADIATION PATTERN



Leadframe orientation parallel

Tolerance ± 0.25 mm

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

PARAMETER	MAX.	UNIT
Power Dissipation	80	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 $T_a = 25^\circ\text{C}$

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V F	Forward Voltage	I F = 20 mA		2.3	2.8	V
I R	Reverse Current	V R = 5V			100	μA
λ_p	Peak Emission Wavelength	I F = 20 mA		634		nm
λ_d	Dominant Wavelength	I F = 20 mA		629		nm
$2\theta_{1/2}$	Viewing Angle	I F = 20 mA		100/40		Deg

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

Bin	F	G	H	I	J	K
Min.	360	465	600	780	1000	1300
Max.	465	600	780	1000	1300	1680

Tolerance $\pm 15\%$ mcd

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

*Dominant Wavelength, λ_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.



AlInGaP/GaP LED

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES(Transparent Substrate)

FIG. 1 Forward Current Vs. Forward Voltage

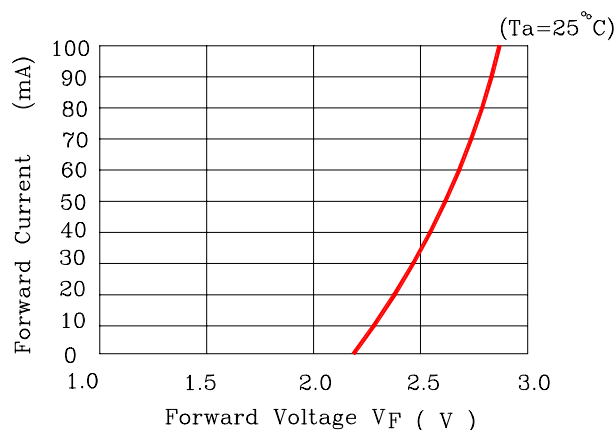


FIG. 2 Relative Intensity Vs. Forward Current

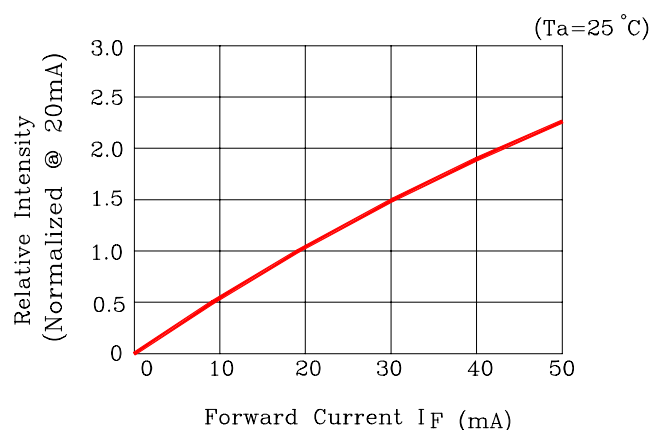


FIG. 3 Forward Voltage VS. Temperature

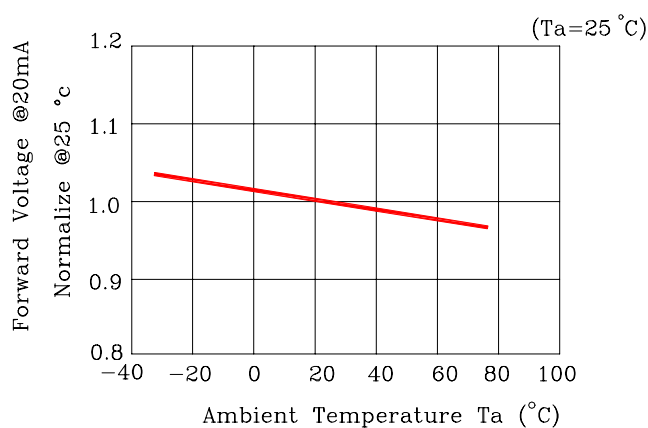


FIG. 4 Relative Intensity vs. Temperature

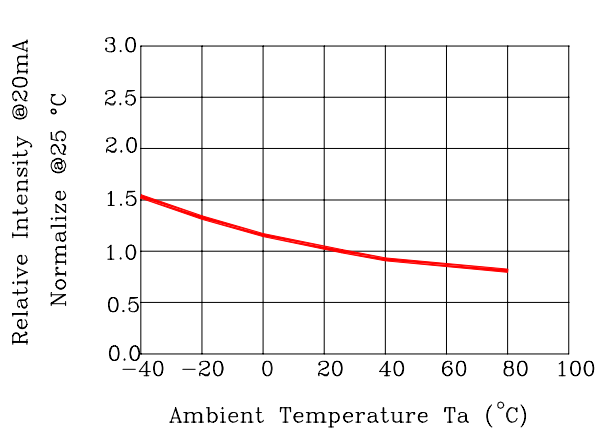


FIG. 5 Relative Intensity vs. Wavelength (λ_p)

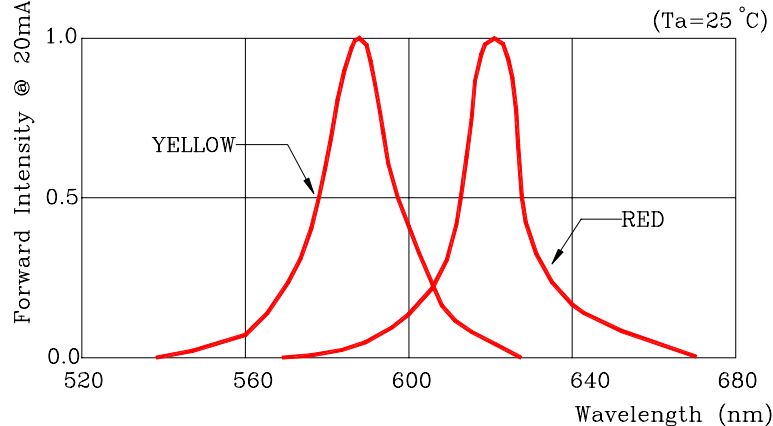
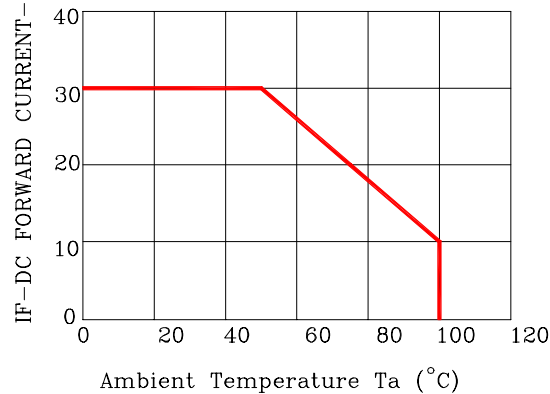
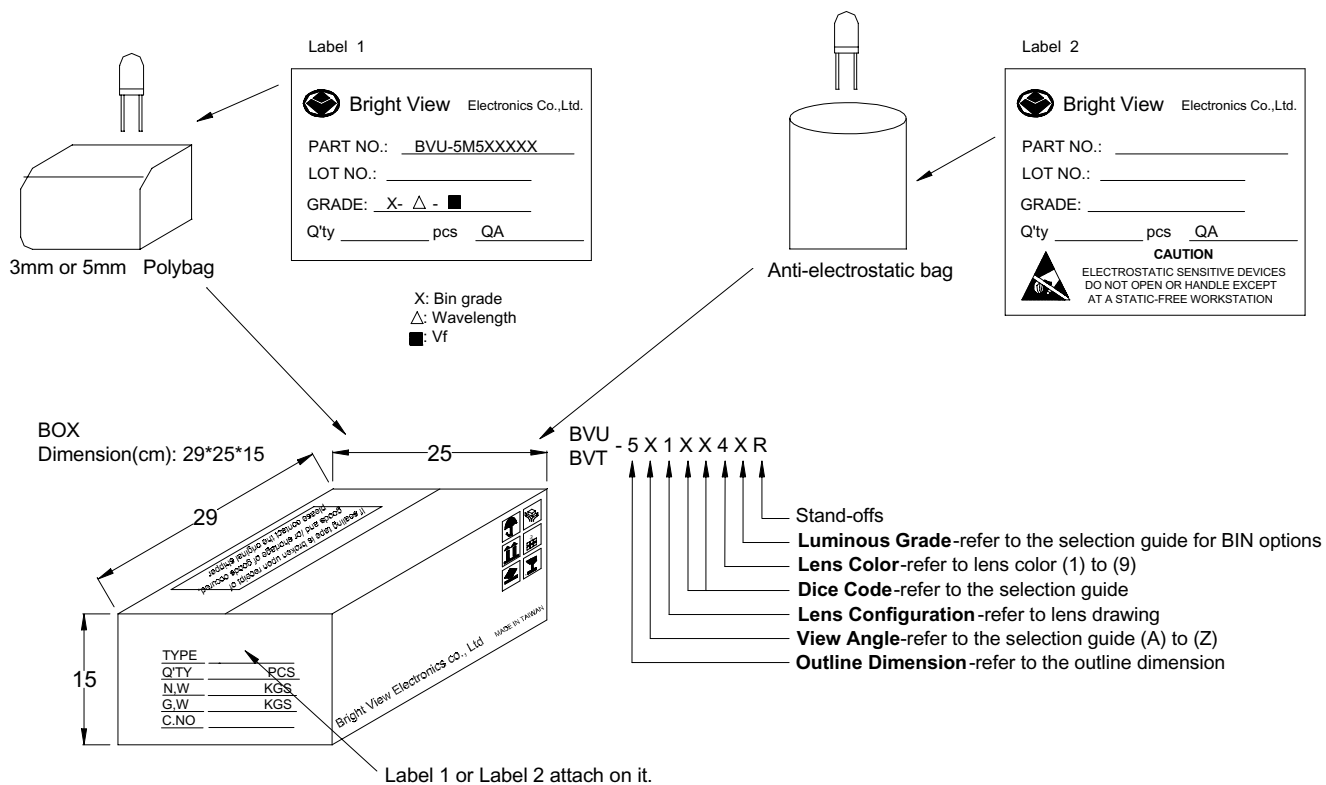
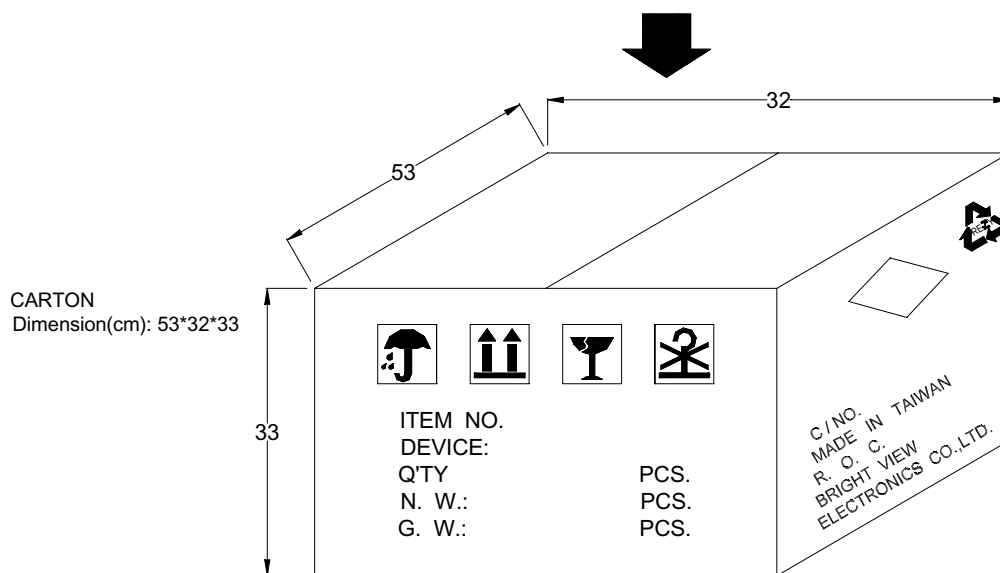


FIG. 6 Maximum Forward Current vs. Ambient Temperature. Derating Based on $T_{JMAX} = 130^\circ\text{C}$





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