



**BVU-3R2QT4**

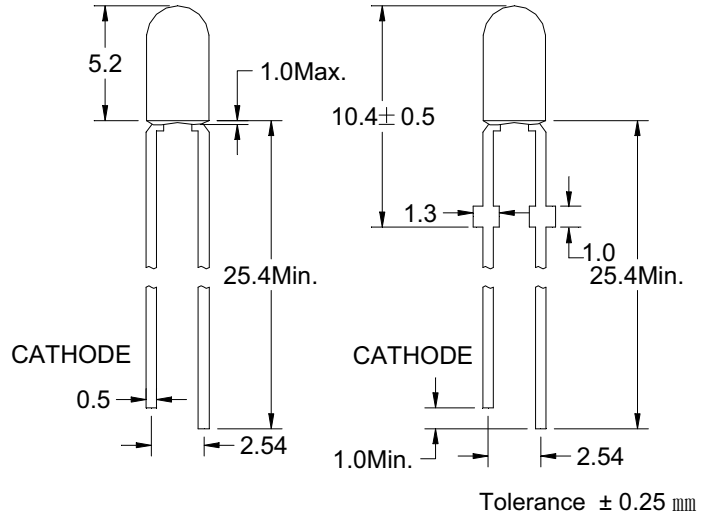
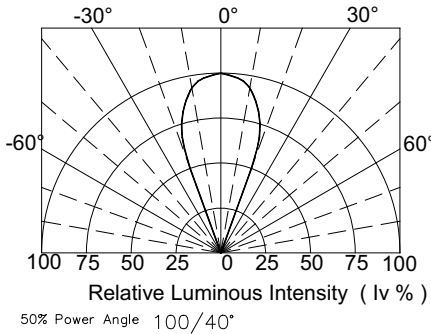
**PACKAGE CONFIGURATION**

**DESCRIPTION**

Dice Material : AlInGaP Orange Red  
Light Color : Orange Red Color  
Lens Color : Water Transparent  
Stand-Off P/N : BVU-3R2QT4 R



**RADIATION PATTERN**



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

PARAMETER	MAX.	UNIT
Power Dissipation (PD)	80	mW
Continuous Forward Current (IF)	30	mA
Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width ) (IFP)	160	mA
Reverse Voltage (VR)	5	V
Derating Linear From 50 °C	0.4	mA/°C
Operating Temperature Range (Topr)	-40 °C to + 100 °C	
Storage Temperature Range (Tstg)	-40 °C to + 100 °C	
Lead Solder Temperature 1.6 mm Below Package	260 °C for 5 seconds (Tsltd)	

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

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
VF	Forward Voltage	IF = 20 mA		2.3	2.8	V
IR	Reverse Current	VR = 5V			100	μA
λp	Peak Emission Wavelength	IF = 20 mA		634		nm
λd	Dominant Wavelength	IF = 20 mA		629		nm
2θ 1/2	Viewing Angle	IF = 20 mA		40		Deg
Iv	Luminous Intensity	IF = 20 mA	780	1150		mcd

**BIN GRADE LIMITS (IF=20 mA)**

**LUMINOUS INTENSITY / mcd**

Bin	I	J	K	L	M	N
Min.	780	1000	1300	1680	2180	2800
Max.	1000	1300	1680	2180	2800	3600

**BIN GRADE LIMITS (IF=20 mA)**

**DOMINANT WAVELENGTH / nm**

Bin	QD	QE	QF	QG
Min.	618	622	626	630
Max.	622	626	630	634

Tolerance ± 15% mcd

\*Bright View reserves the rights to alter specifications and remove availability of products at any time without notice.  
\*Dominant Wavelength, λd is according to CIE Chromaticity Diagram base on color of lamps.  
\*θ 1/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.



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### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current vs. Forward Voltage  
( $T_a = 25^\circ\text{C}$ )

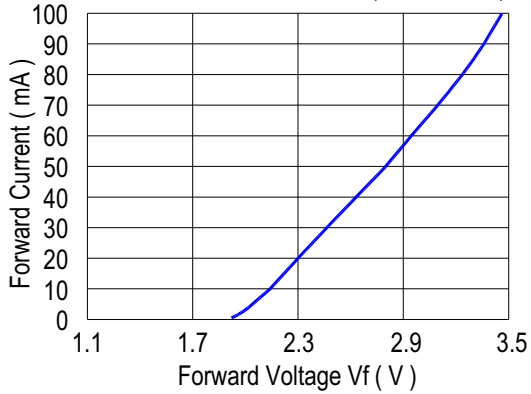


FIG. 2 Relative Intensity vs. Forward Current  
( $T_a = 25^\circ\text{C}$ )

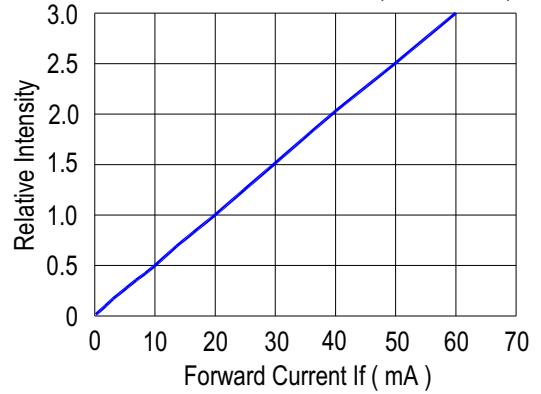


FIG. 3 Forward Voltage vs. Temperature

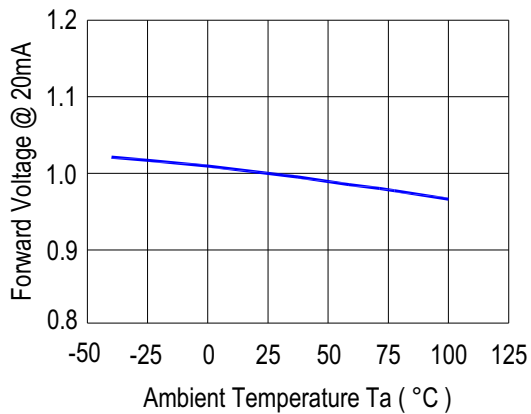


FIG. 4 Relative Intensity vs. Temperature

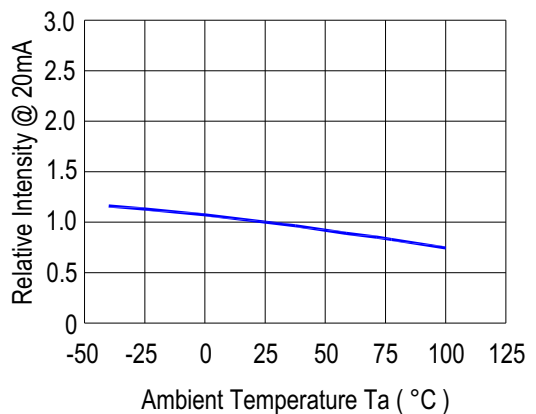


FIG. 5 Relative Intensity vs. Wavelength ( $\lambda_p$ )  
( $T_a = 25^\circ\text{C}$ )

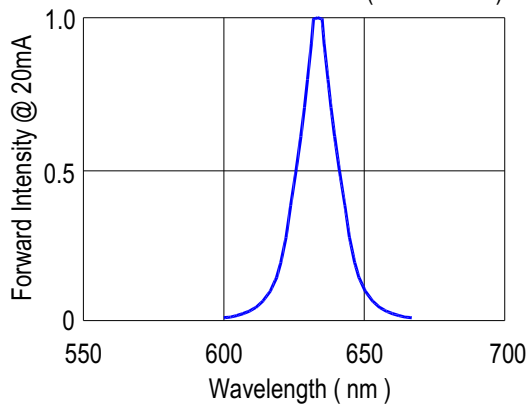
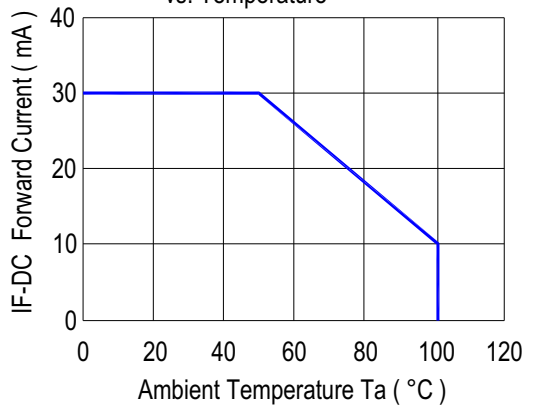


FIG. 6 Maximum Forward Current  
vs. Temperature





## BVU-3R2QT4

Apply to LAMP(DIP) series.

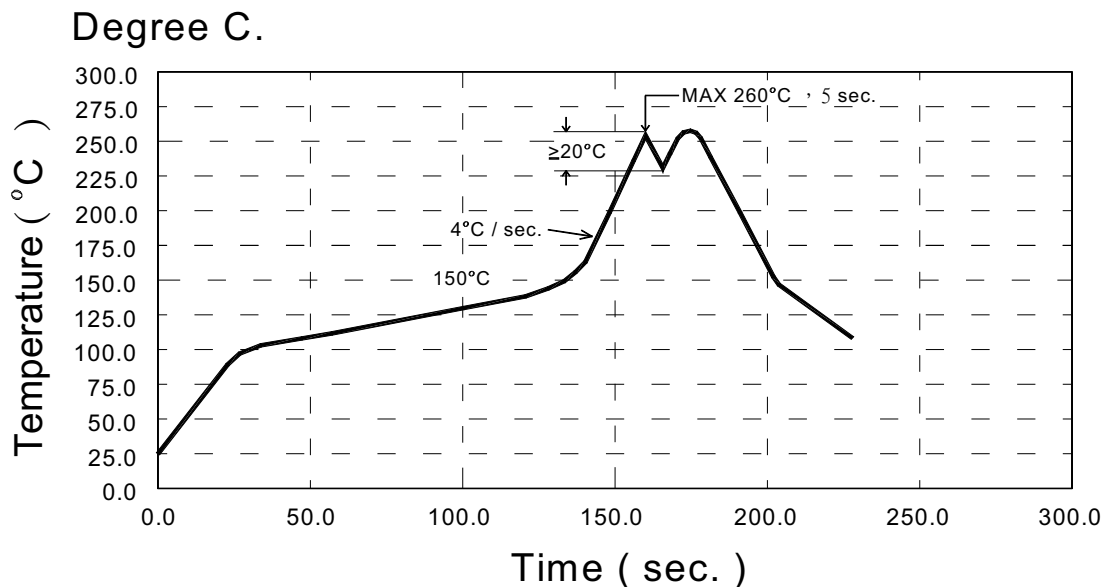
Description:

( 1 ) Manual soldering (Solder Iron)

- (1.1) Temperature at tip of the iron: 300°C Max.
- (1.2) It's banned to load any stress on the resin during soldering.
- (1.3) Soldering time: 3 sec. Max.(one time only)
- (1.4) Leave 3mm of minimum distance from the base of epoxy.

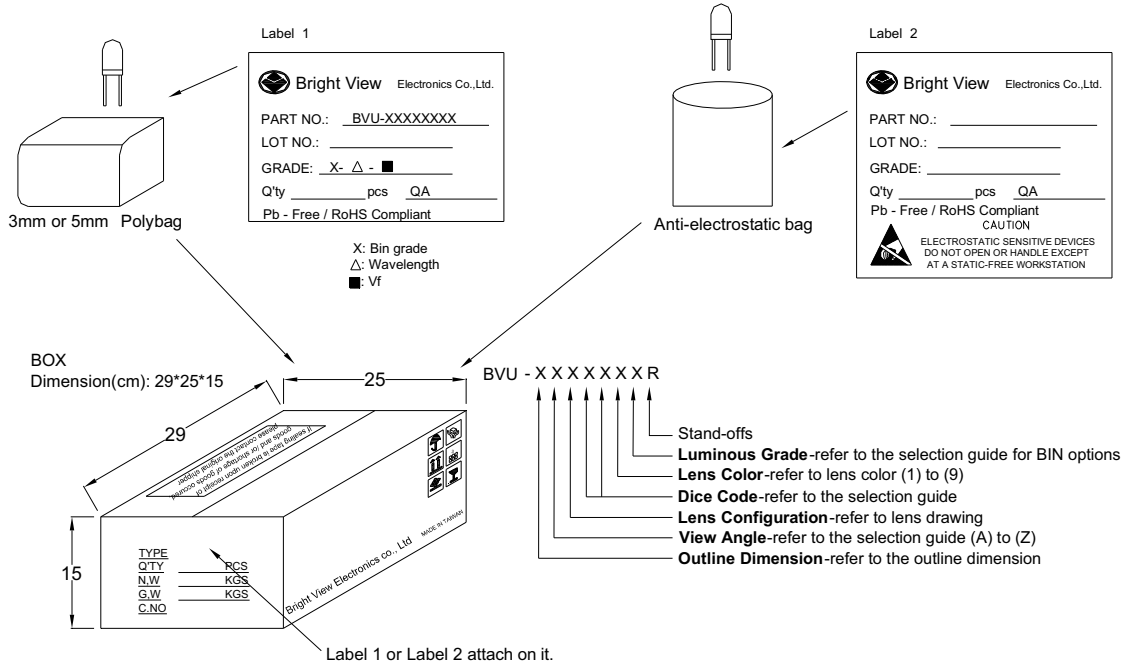
( 2 ) Dip Soldering(Wave soldering-Solder Bath)

- (2.1) Leave 3mm of minimum distance from the base of the epoxy.  
Soldering beyond the base of the tie bar(stand off) is recommended.
- (2.2) When soldering, do not put stress on the LEDs during heating.
- (2.3) Cutting the leadframes at high temperatures may cause LED failure.
- (2.4) Never take next process until the component is cooled down to room temperature after reflow.
- (2.5) After soldering, do not warp the circuit board.
- (2.6) The recommended dip soldering profile is the following:

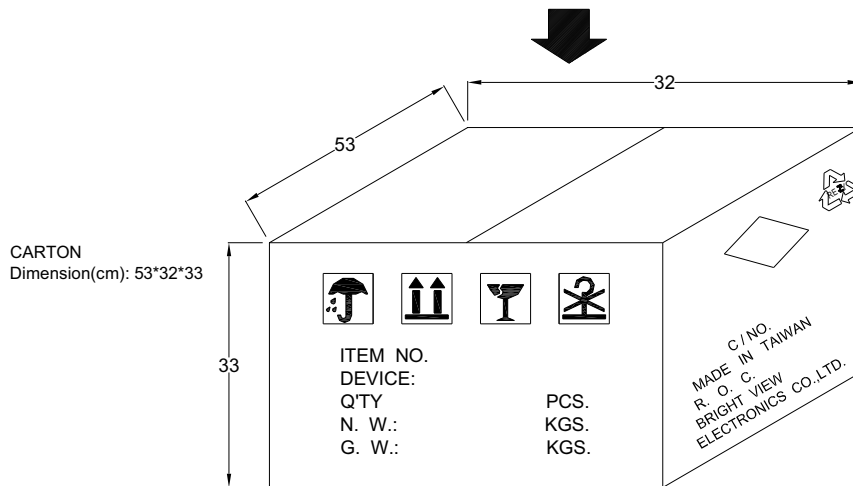




**BVU-3R2QT4**



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