

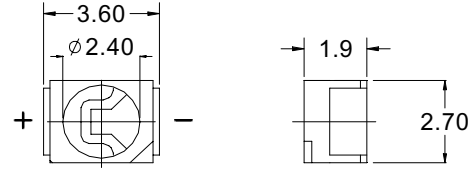


**BVS-301QT4**

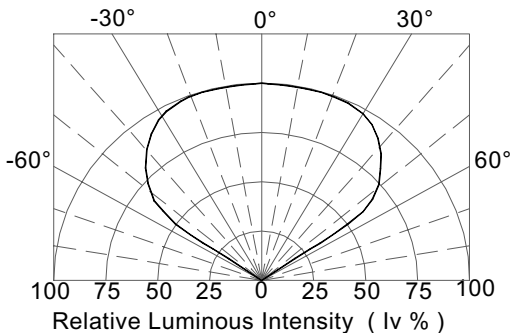
**PACKAGE CONFIGURATION**

**DESCRIPTION**

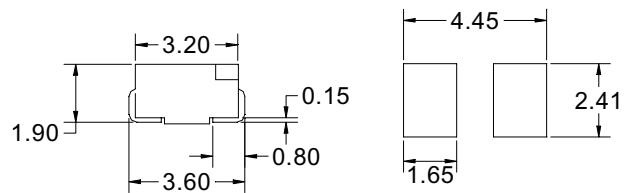
Dice Material : AllInGaP/GaP Orange Red  
Light Color : Orange Red Color  
Lens Color : Water Transparent



**RADIATION PATTERN**



**INFRARED/VAPOR PHASE REFLOW SOLDERING**



Tolerance  $\pm 0.25$  mm

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

PARAMETER	MAX.	UNIT
Power Dissipation	100	mW
Continuous Forward Current	35	mA
Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width )	60	mA
Reverse Voltage	5	V
Derating Linear From 50 °C	0.35	mA/°C
Operating Temperature Range	-40 to + 100	°C
Storage Temperature Range	-40 to + 100	°C
Reflow Soldering Condition 230 °C for 10 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		2.3	2.8	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		634		nm
λ <sub>d</sub>	Dominant Wavelength	I <sub>F</sub> = 20 mA		629		nm
2θ <sub>1/2</sub>	Viewing Angle	I <sub>F</sub> = 20 mA		110		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  $\pm 15\%$ 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.



Apply to BVS-3XX 、 1XX series.

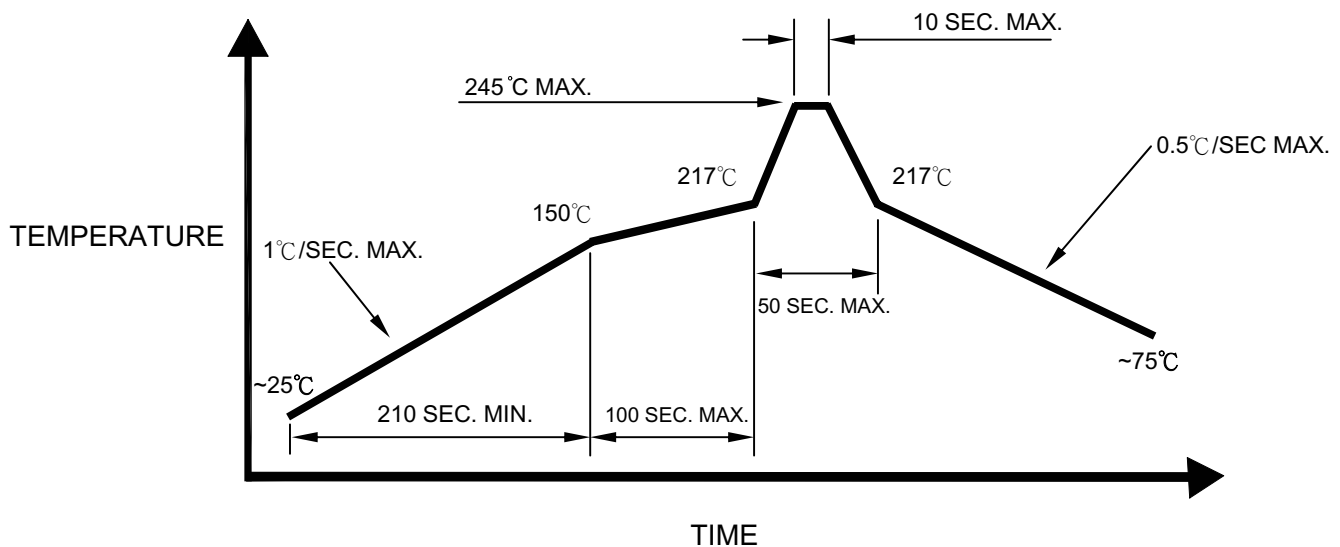
## Description:

(1) Manual soldering (We do not recommend this method strongly.)

- (1.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (1.2) Temperature at tip of iron: 250°C Max. (25W)
- (1.3) It's banned to load any stress on the resin during soldering.
- (1.4) Soldering time: 3 sec. Max. (one time only)

(2) Reflow Soldering

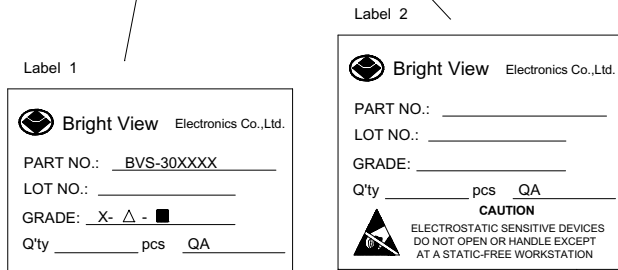
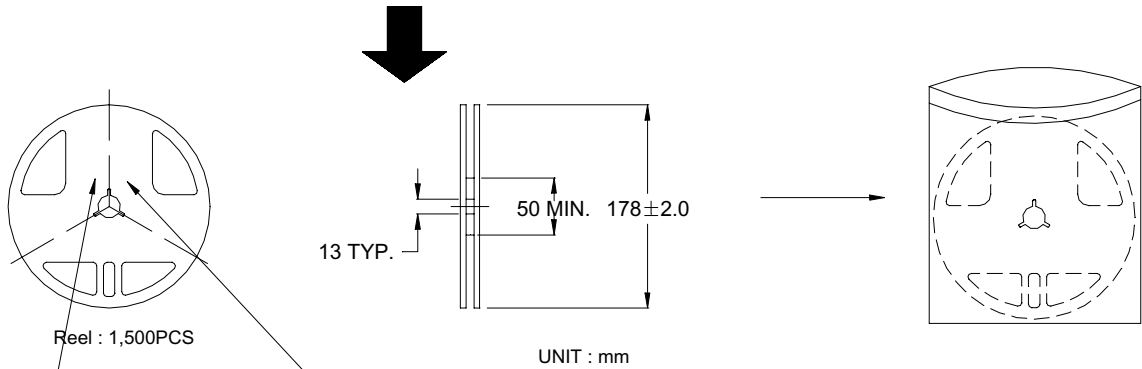
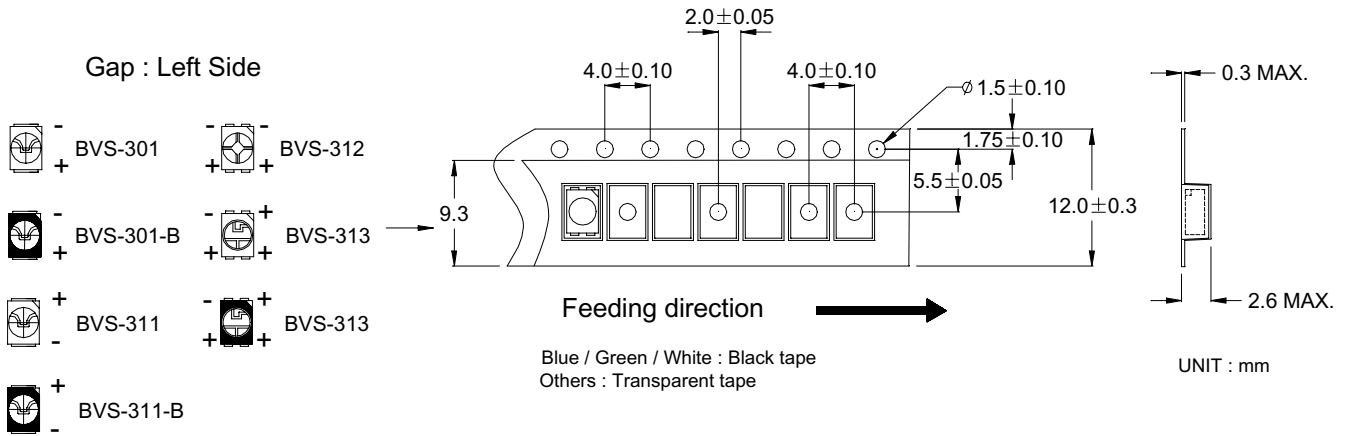
- (2.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (2.2) When soldering, do not put stress on the LEDs during heating.
- (2.3) Never take next process until the component is cooled down to room temperature after reflow.
- (2.4) After soldering, do not warp the circuit board.
- (2.5) The recommended reflow soldering profile (measuring on the surface of the LED resin) is following:



The reflow temperature 240°C~245°C is recommended and the soldering temperature should be not higher than 245°C (one time only)

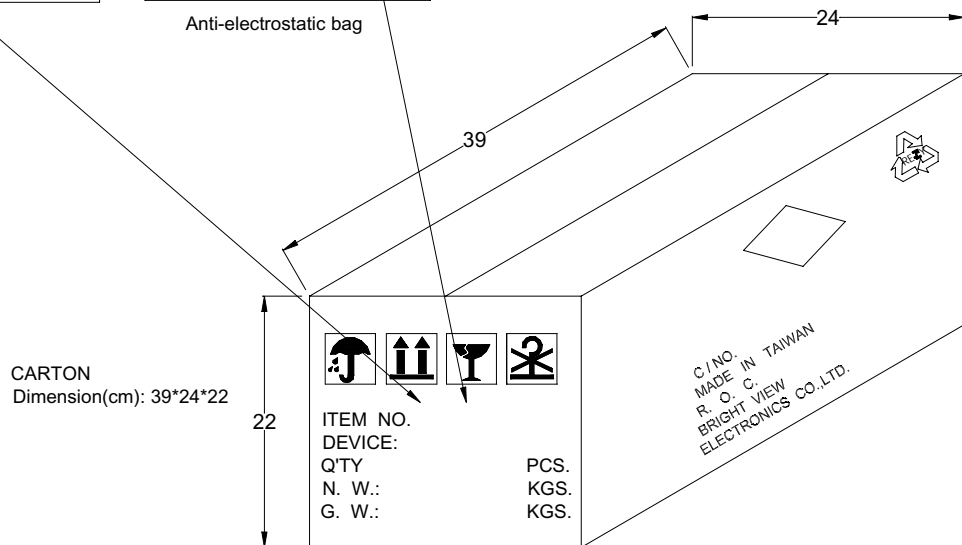


# TOP LEDS PACKING (A)



Normal

X: Bin grade  
△: Wavelength  
■: Vf



Carton : 20 Reels  
Total : 30,000PCS