

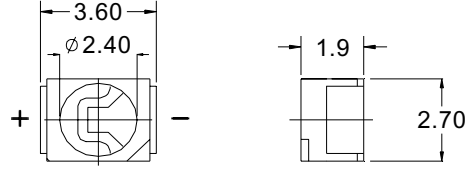


**BVS-301YA4**

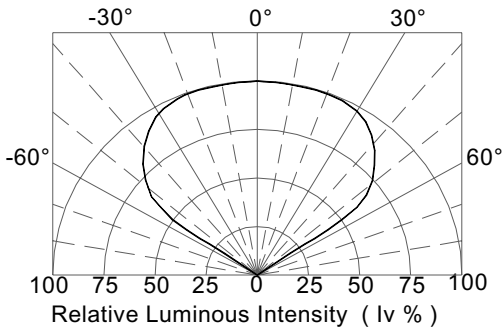
**PACKAGE CONFIGURATION**

**DESCRIPTION**

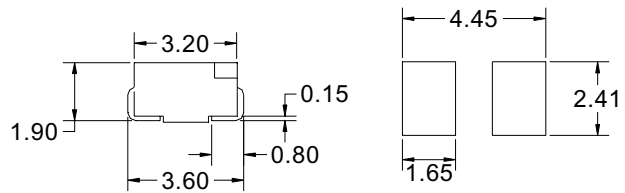
Dice Material : AlGaInP Yellow  
Light Color : Yellow Color  
Lens Color : Water Transparent



**RADIATION PATTERN**



**INFRARED/VAPOR PHASE  
REFLOW SOLDERING**



Tolerance  $\pm 0.25$  mm

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

PARAMETER	MAX.	UNIT
Power Dissipation	95	mW
Continuous Forward Current	35	mA
Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width )	80	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		2.1	2.7	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 5V			100	$\mu$ A
$\lambda_p$	Peak Emission Wavelength	I <sub>F</sub> = 20 mA		591		nm
$\lambda_d$	Dominant Wavelength	I <sub>F</sub> = 20 mA		589		nm
2 $\theta_{1/2}$	Viewing Angle	I <sub>F</sub> = 20 mA		110		Deg

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

Bin	E	F	G	H	I	J
Min.	280	360	465	600	780	1000
Max.	360	465	600	780	1000	1300

Tolerance  $\pm 15\%$ 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.



Apply to BVS-3XX 、 1XX series.

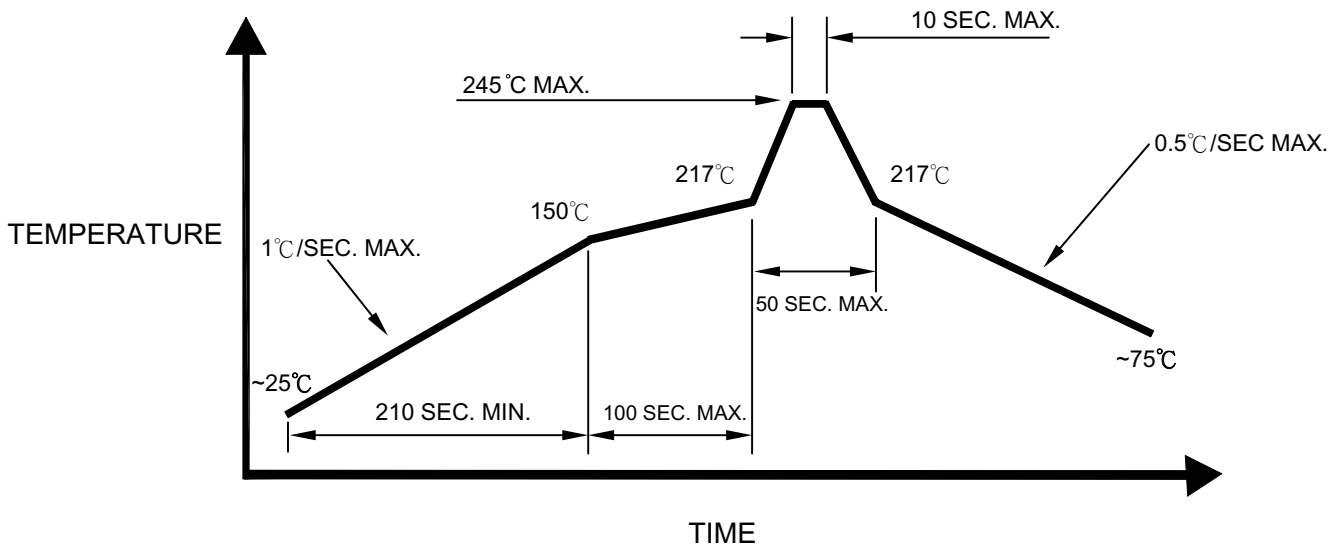
## Description:

(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

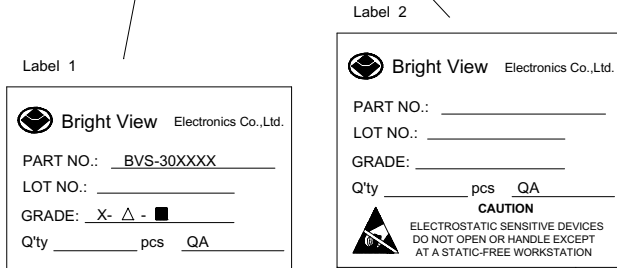
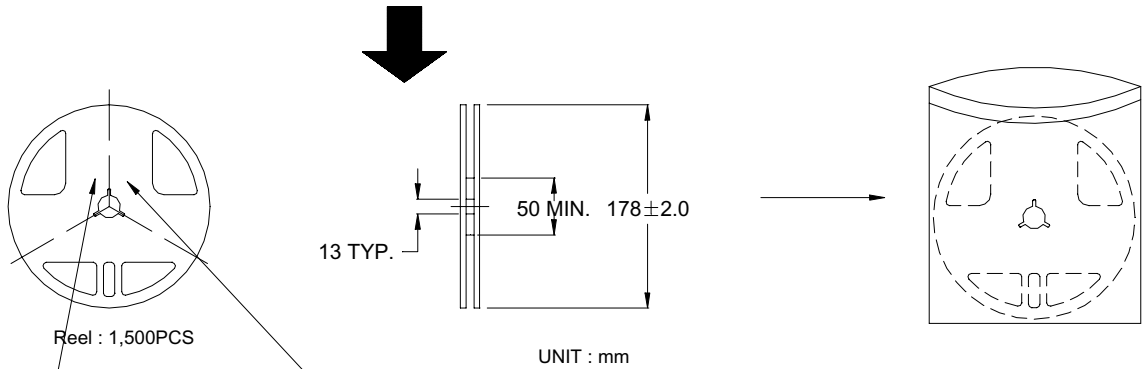
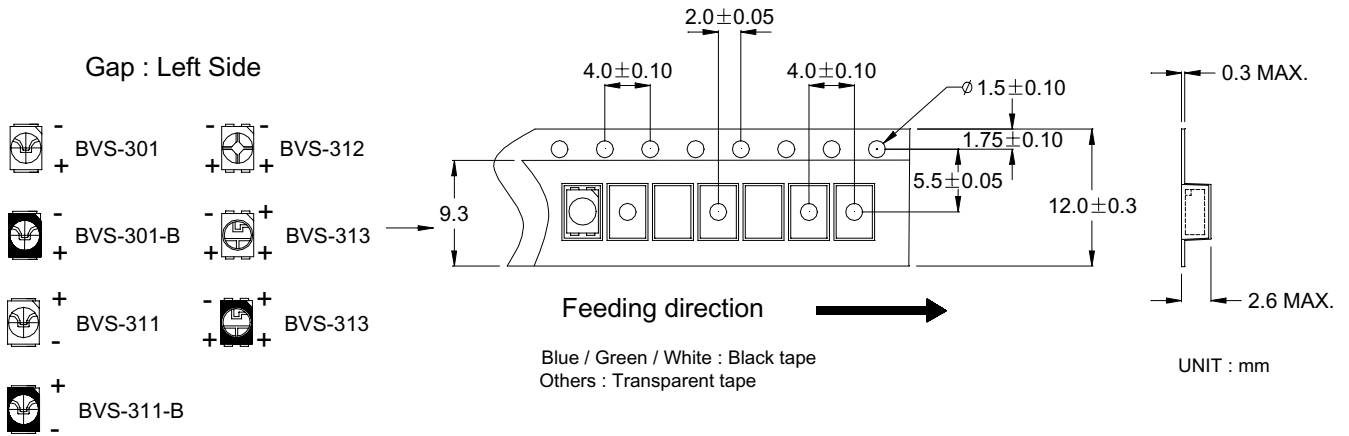
- (2.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (2.2) When soldering, do not put stress on the LEDs during heating.
- (2.3) Never take next process until the component is cooled down to room temperature after reflow.
- (2.4) After soldering, do not warp the circuit board.
-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

