

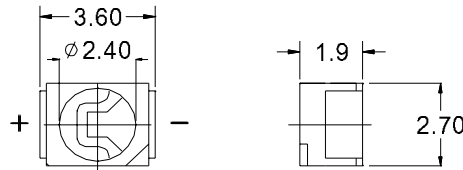


BVS-301RE4#

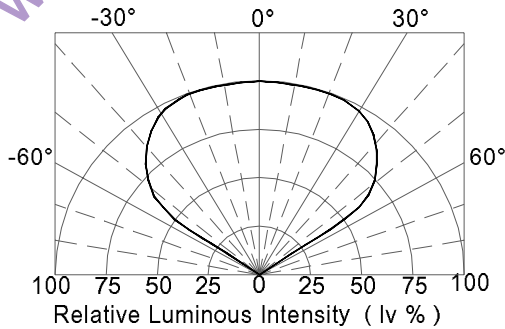
PACKAGE CONFIGURATION

DESCRIPTION

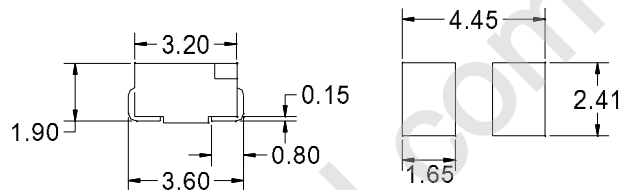
Dice Material : AlGaInP/GaAs Orange Red
Light Color : Orange Red Color
Lens Color : Water Transparent



RADIATION PATTERN



**INFRARED/VAPOR PHASE
REFLOW SOLDERING**



Tolerance ± 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 _F | Forward Voltage | I _F = 20 mA | | 2 | 2.6 | V |
| I _R | Reverse Current | V _R = 5V | | | 100 | μA |
| λ _p | Peak Emission Wavelength | I _F = 20 mA | | 645 | | nm |
| λ _d | Dominant Wavelength | I _F = 20 mA | | 632 | | nm |
| 2θ _{1/2} | Viewing Angle | I _F = 20 mA | | 110 | | Deg |

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

| Device | <input type="checkbox"/> BVS-301RE4C | | | <input type="checkbox"/> BVS-301RE4D | | | <input type="checkbox"/> BVS-301RE4E | | | <input type="checkbox"/> BVS-301RE4F | | |
|--------|--------------------------------------|----|----|--------------------------------------|-----|-----|--------------------------------------|-----|-----|--------------------------------------|-----|-----|
| Bin | v | w | x | y | z | A | B | C | D | E | F | G |
| Min. | 28 | 36 | 47 | 60 | 78 | 100 | 130 | 168 | 218 | 280 | 360 | 465 |
| Max. | 36 | 47 | 60 | 78 | 100 | 130 | 168 | 218 | 280 | 360 | 465 | 600 |

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.

*θ_{1/2} is the off-axis angle where the luminous intensity is one half the on-axis intensity.



Apply to BVS-3XX · 1XX series.

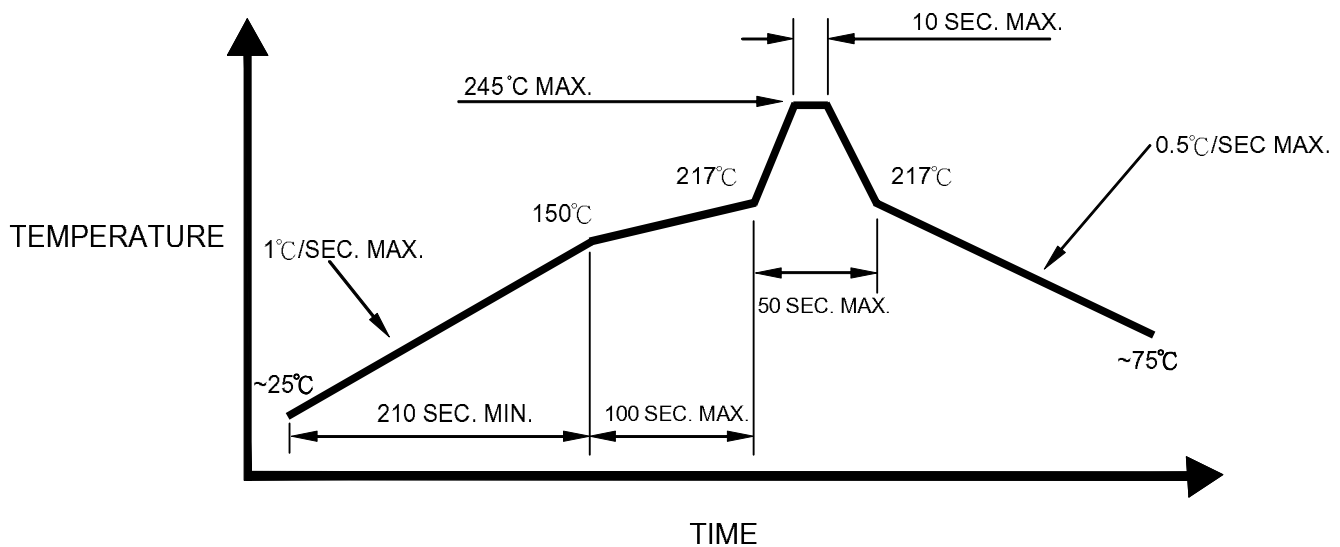
Description:

(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

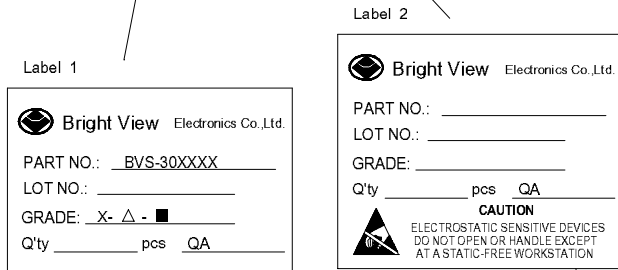
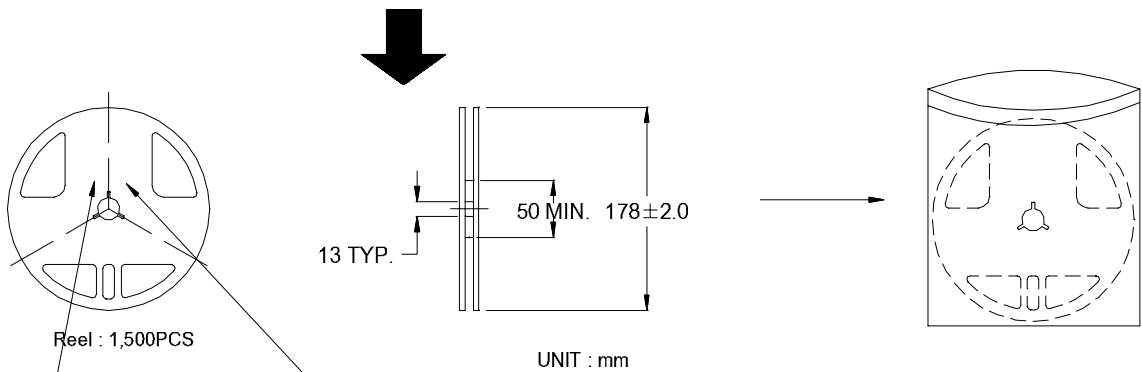
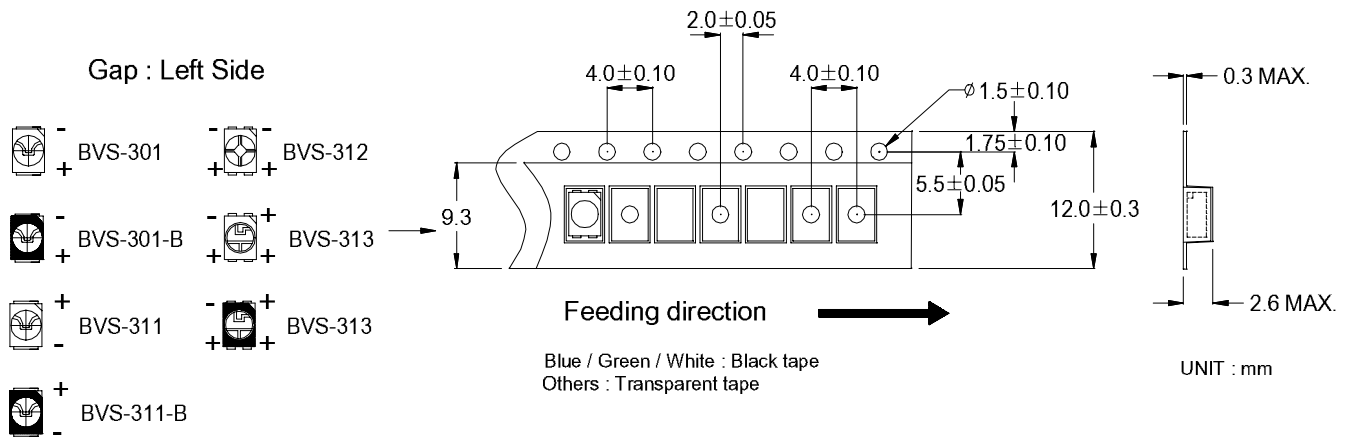
- (2.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (2.2) When soldering, do not put stress on the LEDs during heating.
- (2.3) Never take next process until the component is cooled down to room temperature after reflow.
- (2.4) After soldering, do not warp the circuit board.
-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

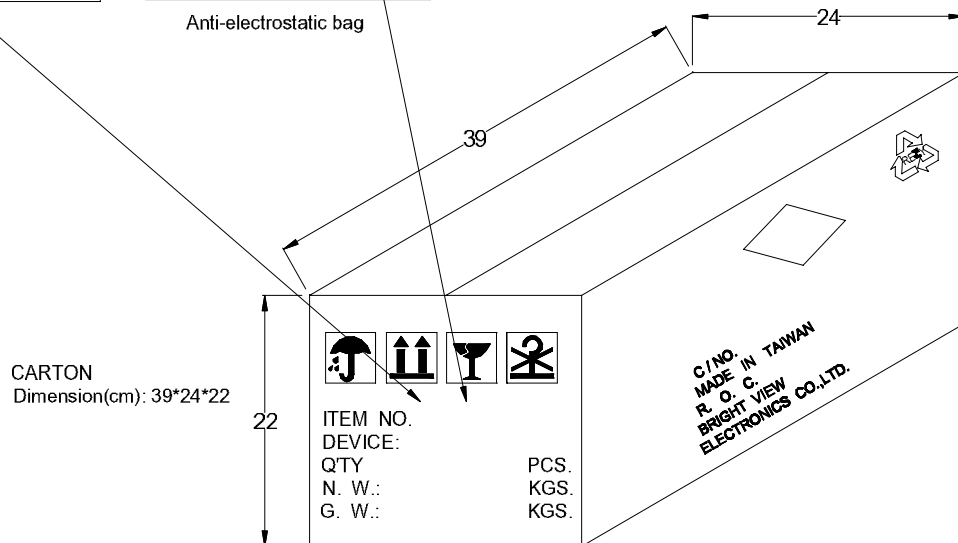


TOP LEDS PACKING (A)



Normal

X: Bin grade
Δ: Wavelength
■: Vf



Carton : 20 Reels
Total : 30,000PCS