

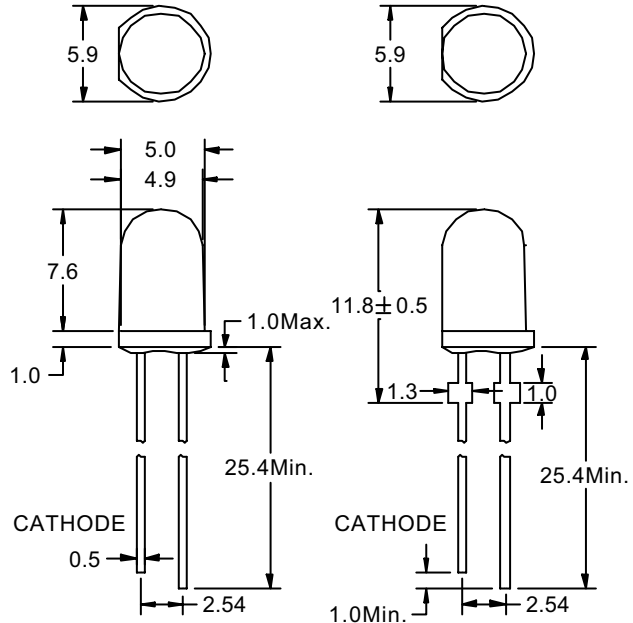
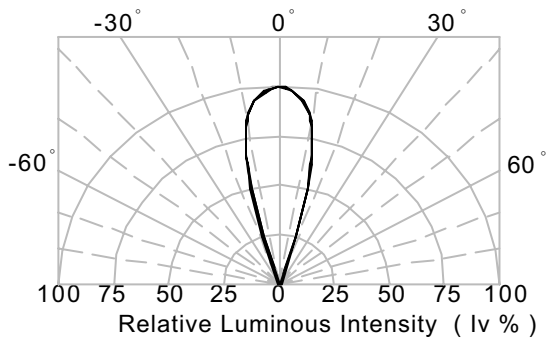
BVU-5M5TH4

PACKAGE CONFIGURATION

DESCRIPTION

Dice Material : AlGaInP/GaAs Yellow
 Light Color : Yellow Color
 Lens Color : Water Transparent
 Stand-Off P/N : BVU-5M5TH4 R

RADIATION PATTERN



Tolerance ± 0.25 mm

ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C

| PARAMETER | MAX. | UNIT |
|--|----------------------|-------|
| Power Dissipation | 75 | 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 Ta = 25 °C

| SYMBOL | PARAMETER | TEST COND. | MIN. | TYP. | MAX. | UNIT |
|-------------------|--------------------------|------------------------|------|------|------|------|
| V _F | Forward Voltage | I _F = 20 mA | | 1.9 | 2.4 | V |
| I _R | Reverse Current | V _R = 5V | | | 100 | μA |
| λ _p | Peak Emission Wavelength | I _F = 20 mA | | 592 | | nm |
| λ _d | Dominant Wavelength | I _F = 20 mA | | 590 | | nm |
| 2θ _{1/2} | Viewing Angle | I _F = 20 mA | | 30 | | Deg |

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

| Bin | L | M | N | O | P | Q |
|------|------|------|------|------|------|------|
| Min. | 1680 | 2180 | 2800 | 3600 | 4650 | 6000 |
| Max. | 2180 | 2800 | 3600 | 4650 | 6000 | 7800 |

Tolerance ± 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.



BVU-5M5TH4

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

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

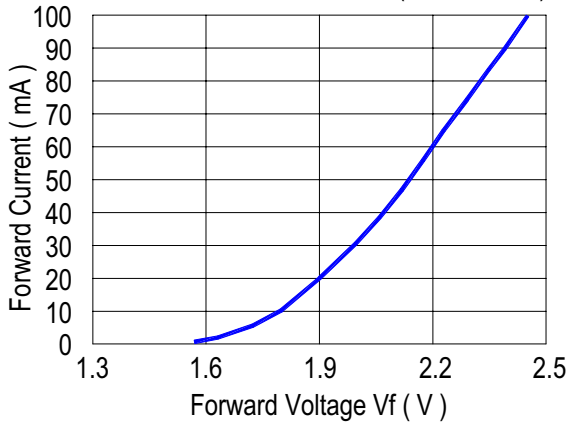


FIG. 2 Relative Intensity vs. Forward Current
($T_a = 25^\circ\text{C}$)

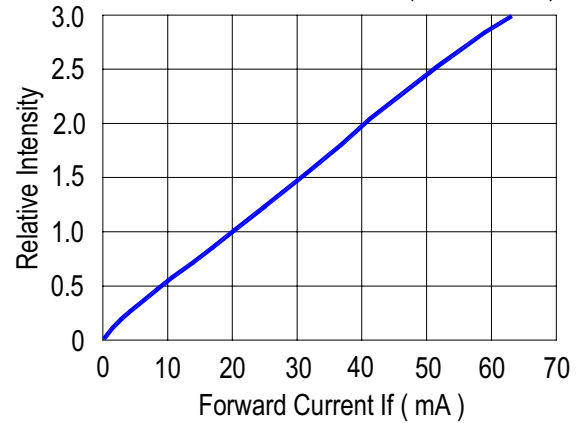


FIG. 3 Forward Voltage vs. Temperature

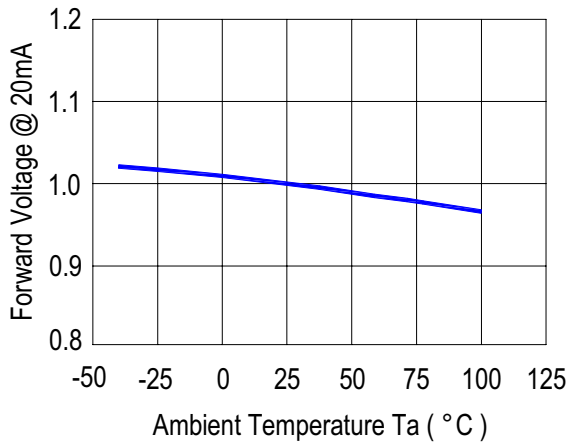


FIG. 4 Relative Intensity vs. Temperature

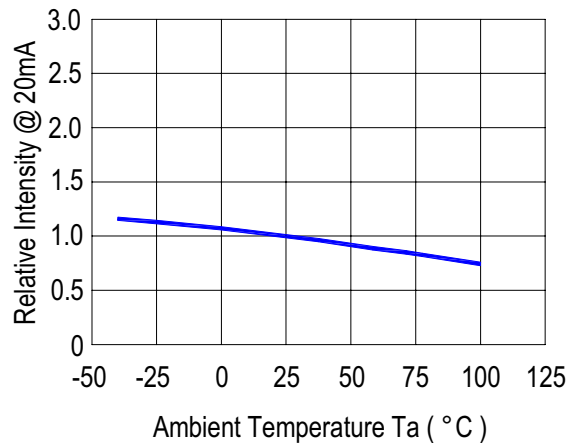


FIG. 5 Relative Intensity vs. Wavelength (λ_p)
($T_a = 25^\circ\text{C}$)

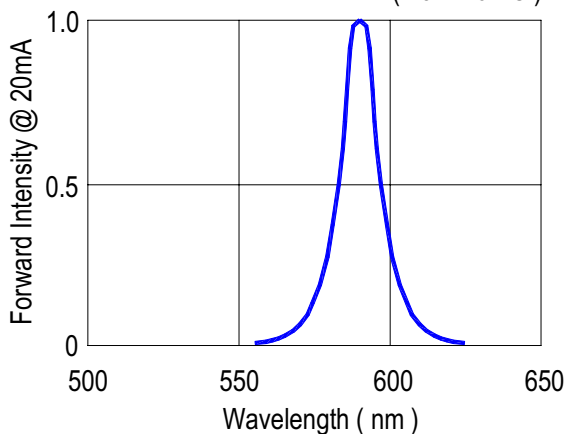
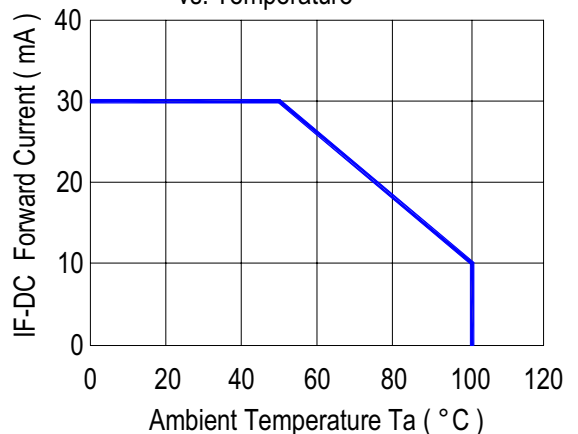


FIG. 6 Maximum Forward Current
vs. Temperature





Apply to LAMP(DIP) series.

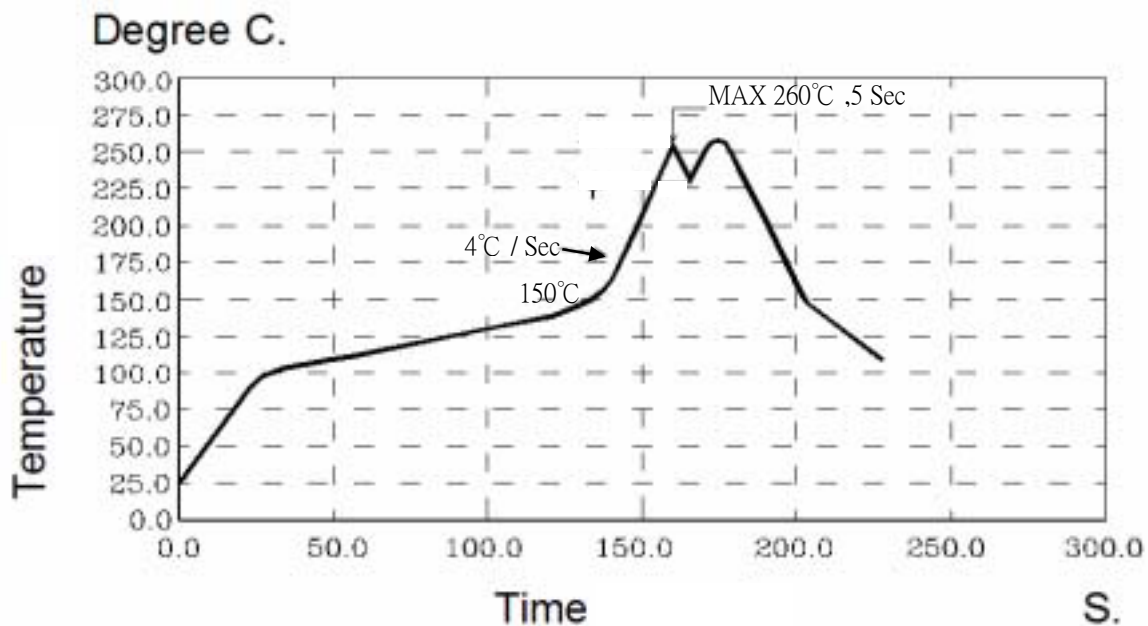
Description:

(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 the epoxy.

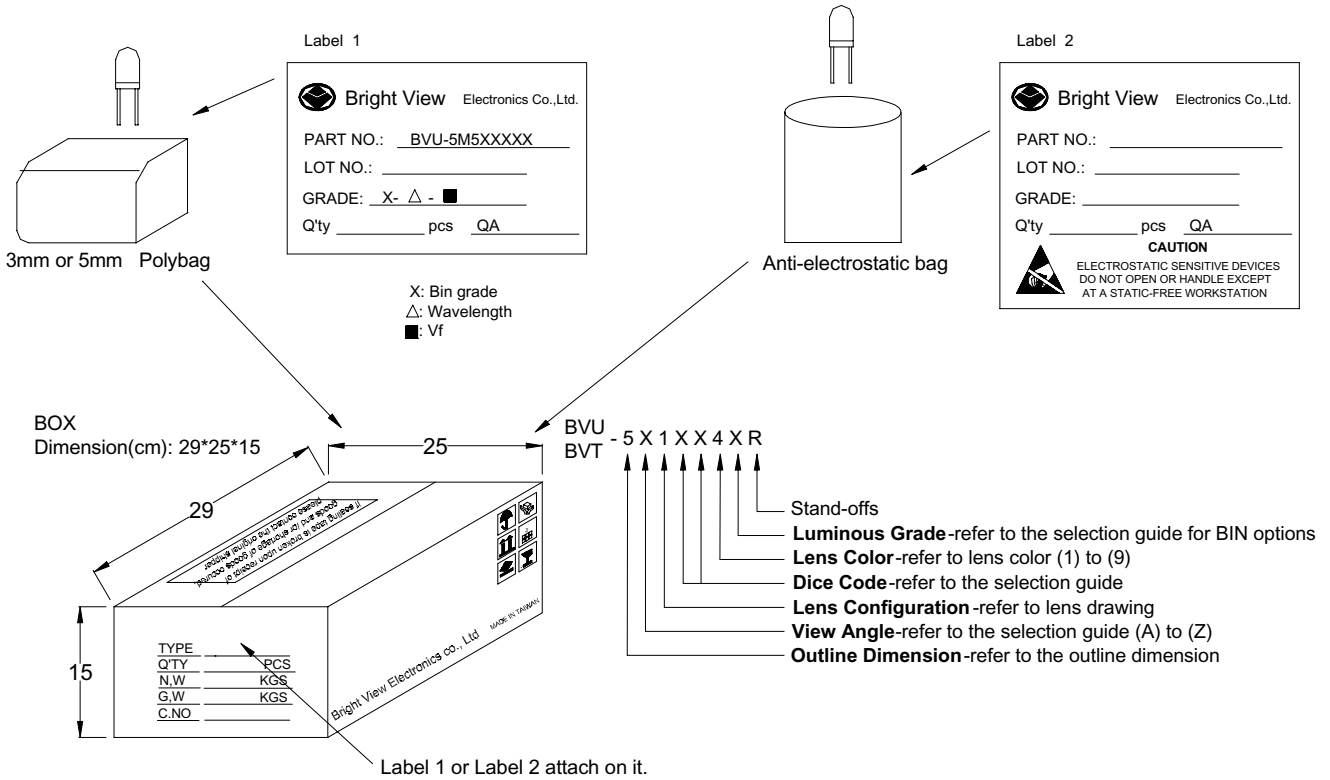
(2) Dip Soldering(Wave soldering-Solder Bath)

- (2.1) Leave 3mm of minimum distance from the base of the epoxy.
Soldering beyond the base of the 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:

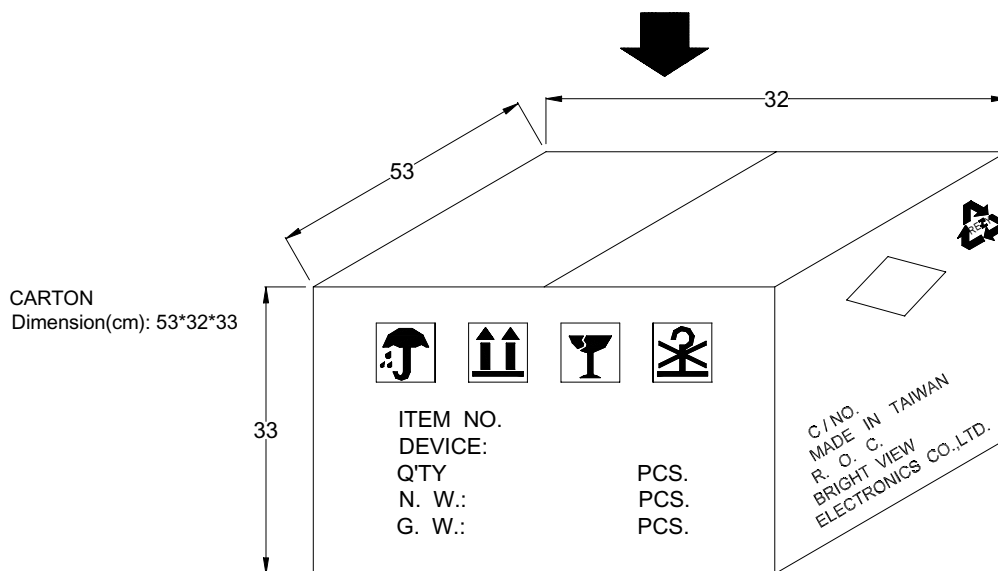




LAMP PACKING



| 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