BRIGHT VIEW
ELECTRONICS CO.,LTD

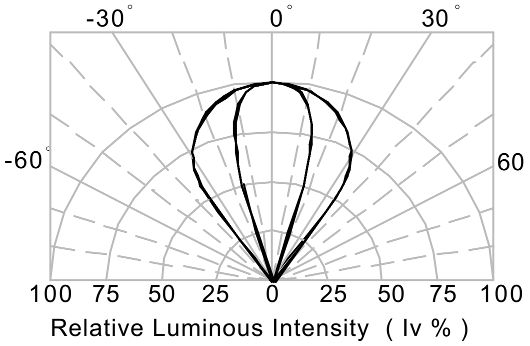
OVAL LED LAMP

BVU-549TT8

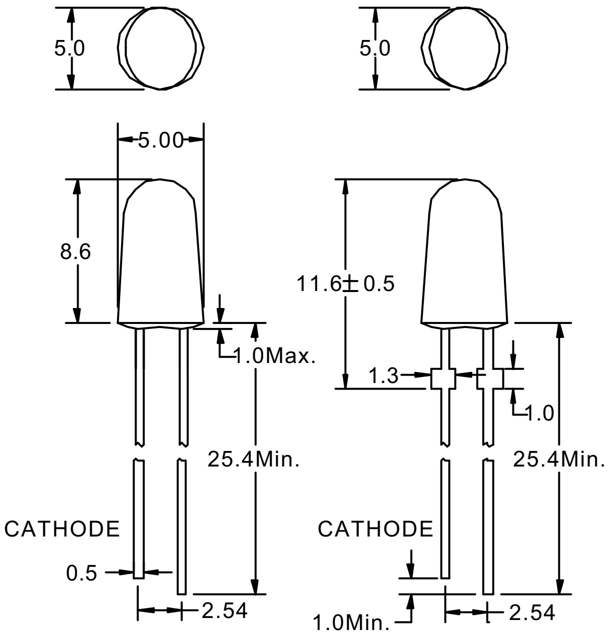
DESCRIPTION

Dice Material : AlInGaP/GaP Yellow
Light Color : Yellow Color
Lens Color : Yellow Tinted Transparent
Stand-Off P/N : BVU-549TT8 R

RADIATION PATTERN



PACKAGE CONFIGURATION



Leadframe orientation perpendicular

Tolerance ±0.25 ㎜

ABSOLUTE MAXIMUM RATINGS AT Ta = 25 ℃

PARAMETER	MAX.	UNIT
Power Dissipation	80	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 ℃	0.4	mA/°C
Operating Temperature Range	−40 ℃ to ＋ 100 ℃	
Storage Temperature Range	−40 ℃ to ＋ 100 ℃	
Lead Solder Temperature 1.6 mm Below Package 260 ℃ for 5 seconds		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 ℃

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V_F	Forward Voltage	I_F = 20 mA		2.3	2.8	V
I_R	Reverse Current	V_R= 5V			100	μA
λ_p	Peak Emission Wavelength	I_F = 20 mA		592		n m
λ_d	Dominant Wavelength	I_F = 20 mA		590		n m
$2\theta_{1/2}$	Viewing Angle	I_F = 20 mA		70/35		Deg

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

Bin	K	L	M	N	O	P
Min.	1300	1680	2180	2800	3600	4650
Max.	1680	2180	2800	3600	4650	6000

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

BVU-549TT8

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current vs. Forward Voltage
(Ta = 25 °C)

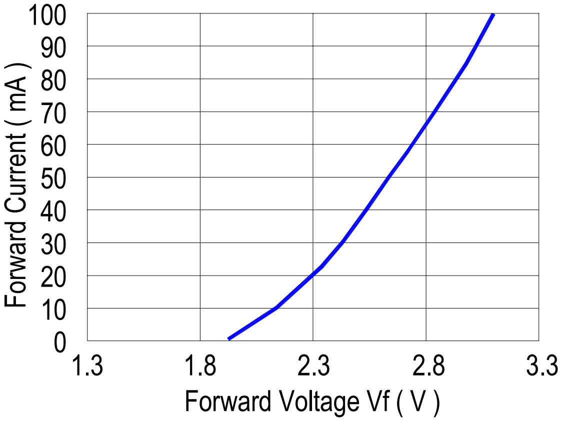


FIG. 2 Relative Intensity vs. Forward Current
(Ta = 25 °C)

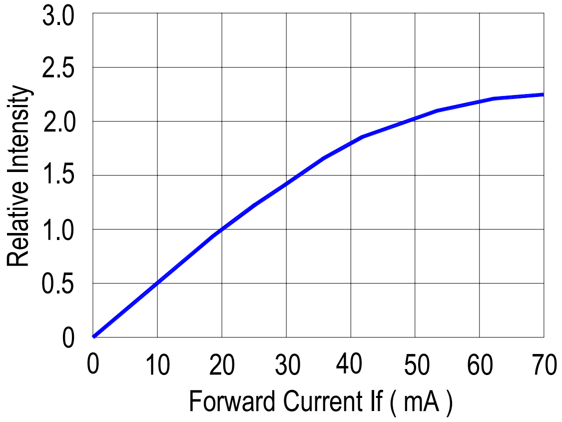


FIG. 3 Forward Voltage vs. Temperature

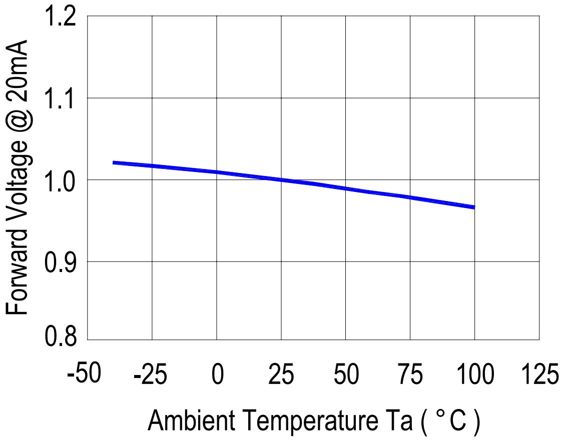


FIG. 4 Relative Intensity vs. Temperature

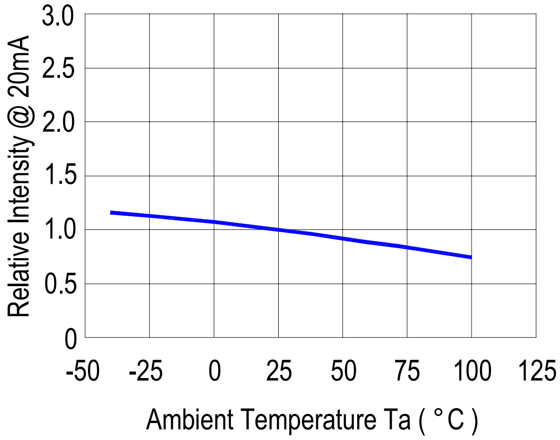


FIG. 5 Relative Intensity vs. Wavelength (λp)
(Ta = 25 °C)

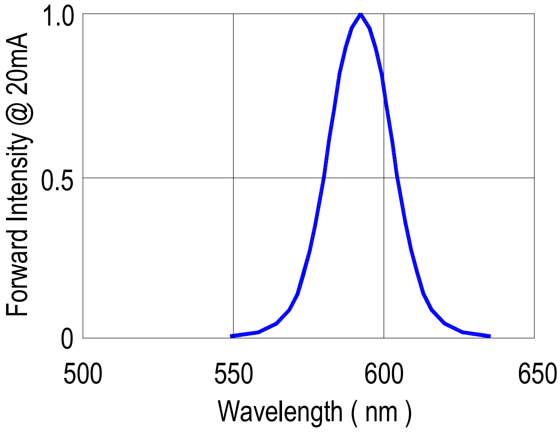
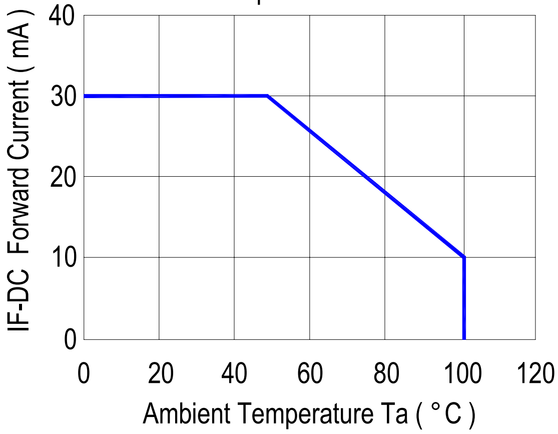


FIG. 6 Maximum Forward Current
vs. Temperature



LAMP APPLICATION (PB FREE SOLDERING)

Apply to LAMP(DIP) series.

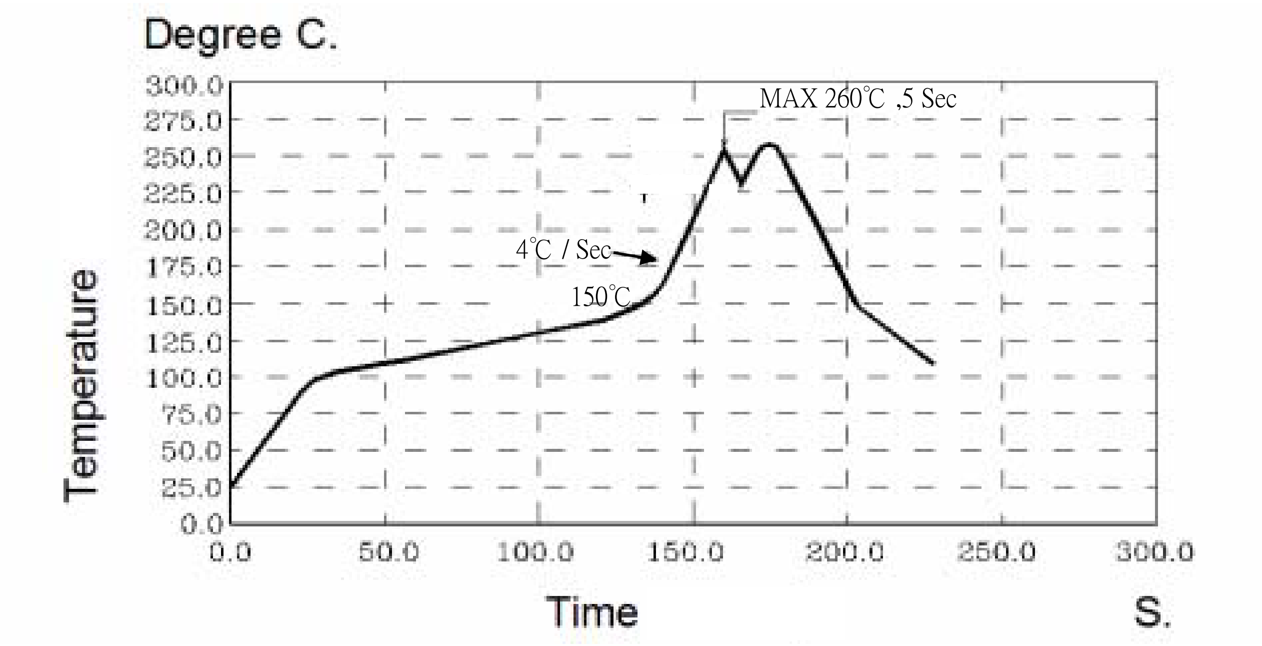
Description:

(1) Manual soldering (Solder Iron)

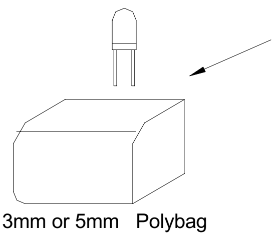
(1.1) Temperature at tip of the iron: 300℃ Max.
(1.2) It's banned to load any stress on the resin during soldering.
(1.3) Soldering time: 3 sec. Max.(one time only)
(1.4) Leave 3mm of minimum distance from the base of the epoxy.

(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:



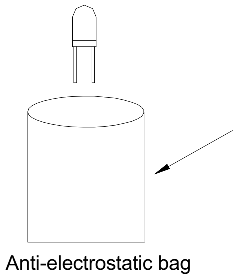
LAMP PACKING



Label 1

Bright View Electronics Co.,Ltd.
PART NO.: BVU-5M5XXXXX
LOT NO.:
GRADE: X- △ - ■
Q'ty pcs QA

X: Bin grade
△: Wavelength
■: Vf

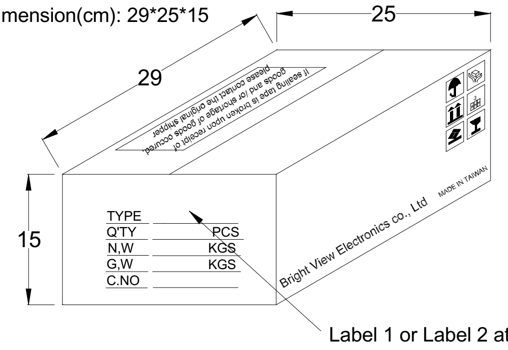


Label 2

Bright View Electronics Co.,Ltd.
PART NO.:
LOT NO.:
GRADE:
Q'ty pcs QA

CAUTION
ELECTROSTATIC SENSITIVE DEVICES
DO NOT OPEN OR HANDLE EXCEPT
AT A STATIC-FREE WORKSTATION

BOX
Dimension(cm): 29*25*15

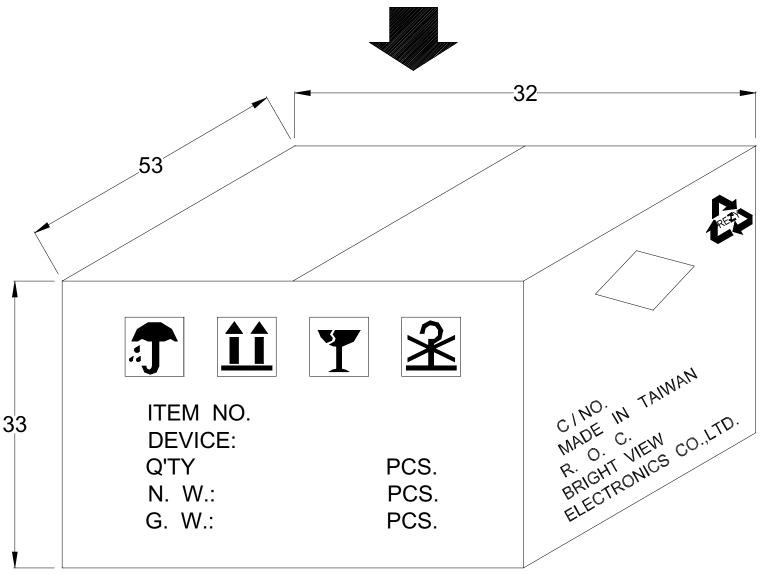


BVU
BVT - 5 X 1 X X 4 X R

- Stand-offs
- **Luminous Grade**-refer to the selection guide for BIN options
- **Lens Color**-refer to lens color (1) to (9)
- **Dice Code**-refer to the selection guide
- **Lens Configuration**-refer to lens drawing
- **View Angle**-refer to the selection guide (A) to (Z)
- **Outline Dimension**-refer to the outline dimension

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

CARTON
Dimension(cm): 53*32*33



4 Boxes / Carton

5mm : 56,000pcs
3mm : 80,000pcs
Blue / Green / White : 36,000pcs

2003 / 9 / 15 - A