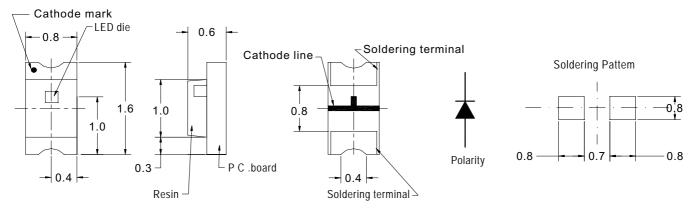
SUPER BRIGHTNESS SMD LED

BVS-166UG2-12

PACKAGE CONFIGURATION



Tolerance ± 0.1 mm

DESCRIPTION

Dice Material: AlGaInP/GaAs Yellow Green

Light Color : Yellow Green Color Lens Color : Milky Diffused

ABSOLUTE MAXIMUM RATINGS AT Ta = 25 $^{\circ}$ C

PARAMETER	MAX.	UNIT
Power Dissipation	55	mW
Continuous Forward Current	20	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Reverse Voltage	5	V
Derating Linear From 25 ℃	0.35	mA/°C
Operating Temperature Range	$-30 \ \text{to} + 80$	°C °C
Storage Temperature Range	$-40 \ ext{to} + 85$	°C
Infrared Soldering Condition 260 ℃ for 5 seconds		
Reflow Soldering Condition 230 ℃ for 10 seconds		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 $^{\circ}$ C

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
VF	Forward Voltage	l F = 20 mA		2.1	2.6	V
IR	Reverse Current	V R = 5V			100	μ A
λр	Peak Emission Wavelength	l F = 20 mA		575		n m
λd	Dominant Wavelength	l F = 20 mA		570		n m
2θ 1/2	Viewing Angle	l F = 20 mA	•	130	•	Deg

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

Bin	Х	У	Z	Α	В	С
Min.	35	42	50	60	70	84
Max.	42	50	60	70	84	100

Tolerance ± 15%mcd

^{*}Bright View reserves the rights to alter specifications and remove availability of products at any time without notice.

^{*}Dominant Wavelength, λd 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.



SMD APPLICATION (PB FREE SOLDERING)

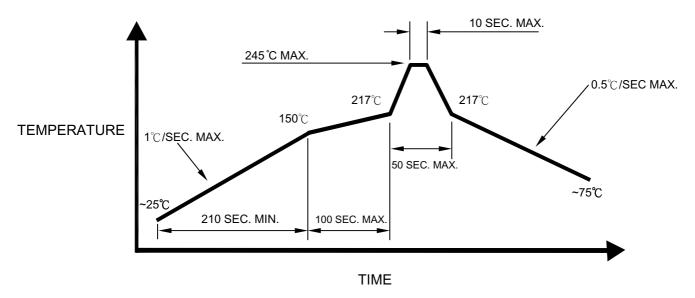
Apply to BVS-3XX \ 1XX series.

Description:

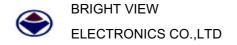
- (1) Manual soldering (We do not recommend this method strongly.)
- (1.1) To prevent cracking, please bake (65°C,24hrs) before soldering.
- (1.2) Temperature at tip of iron: 250°C Max.(25W)
- (1.3) It's banned to load any stress on the resin during soldering.
- (1.4) Soldering time: 3 sec. Max.(one 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)



BVS-166/167 Series

