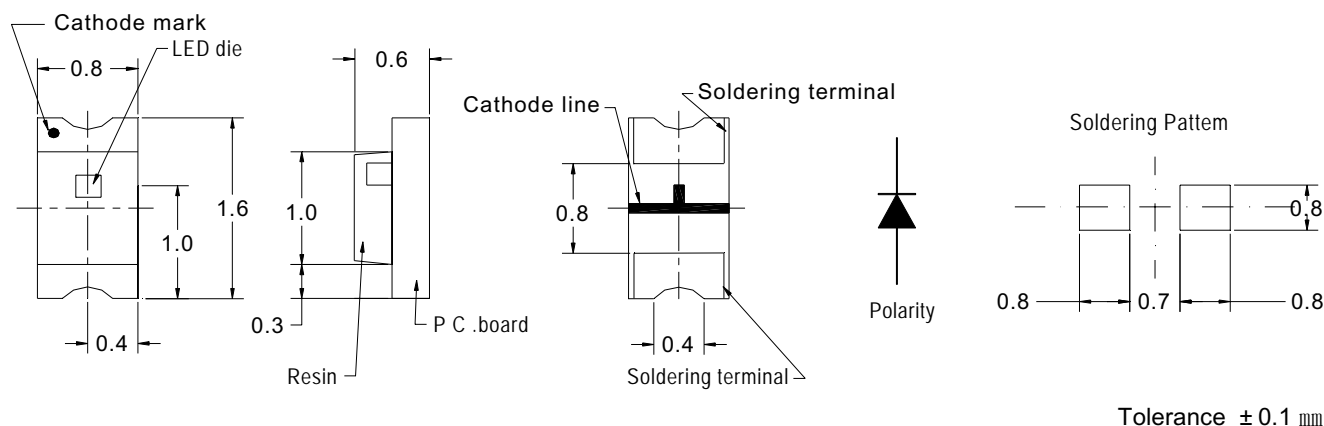




BVS-166RP2

PACKAGE CONFIGURATION



DESCRIPTION

Dice Material : AlGaInP/GaAs Red
Light Color : Red Color
Lens Color : Milky Diffused

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

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°C	0.35	mA/ $^\circ\text{C}$
Operating Temperature Range	-30 to $+80$	$^\circ\text{C}$
Storage Temperature Range	-40 to $+85$	$^\circ\text{C}$
Infrared Soldering Condition 260°C for 5 seconds		
Reflow Soldering Condition 230°C for 10 seconds		

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

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V_F	Forward Voltage	$I_F = 20 \text{ mA}$		2	2.6	V
I_R	Reverse Current	$V_R = 5 \text{ V}$			100	μA
λ_p	Peak Emission Wavelength	$I_F = 20 \text{ mA}$		650		nm
λ_d	Dominant Wavelength	$I_F = 20 \text{ mA}$		639		nm
$2\theta_{1/2}$	Viewing Angle	$I_F = 20 \text{ mA}$		130		Deg

BIN GRADE LIMITS ($I_F = 20 \text{ mA}$) LUMINOUS INTENSITY / mcd

Bin	u	v	w	x	y	z
Min.	22	28	36	47	60	78
Max.	28	36	47	60	78	100

Tolerance $\pm 15\% \text{ mcd}$

*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.



Apply to BVS-3XX 、 1XX series.

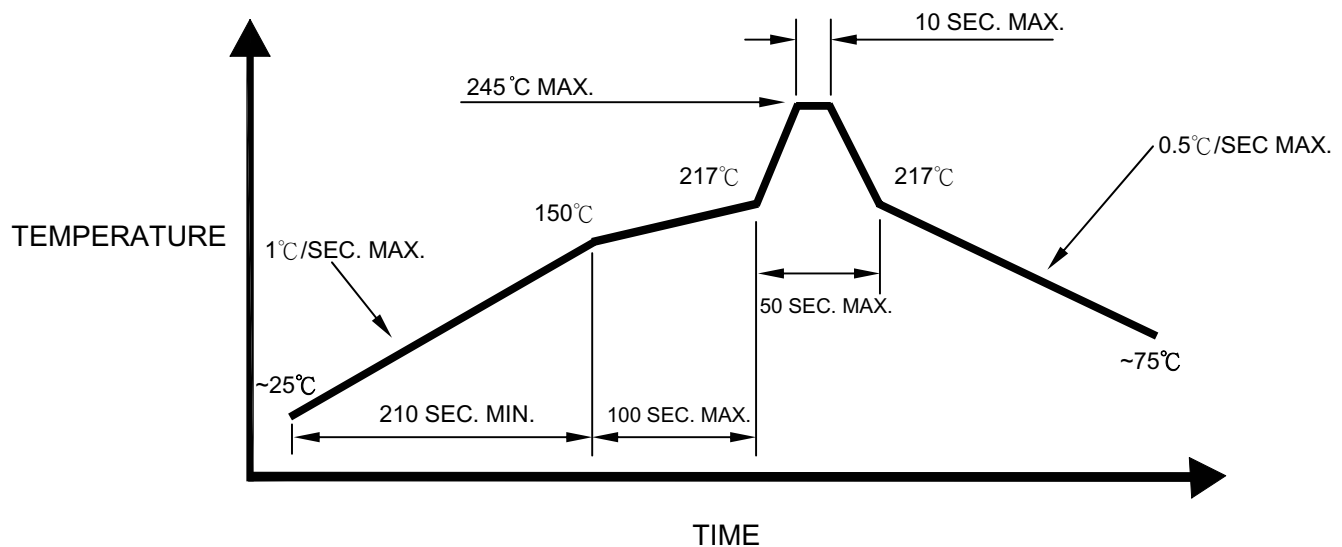
Description:

(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

