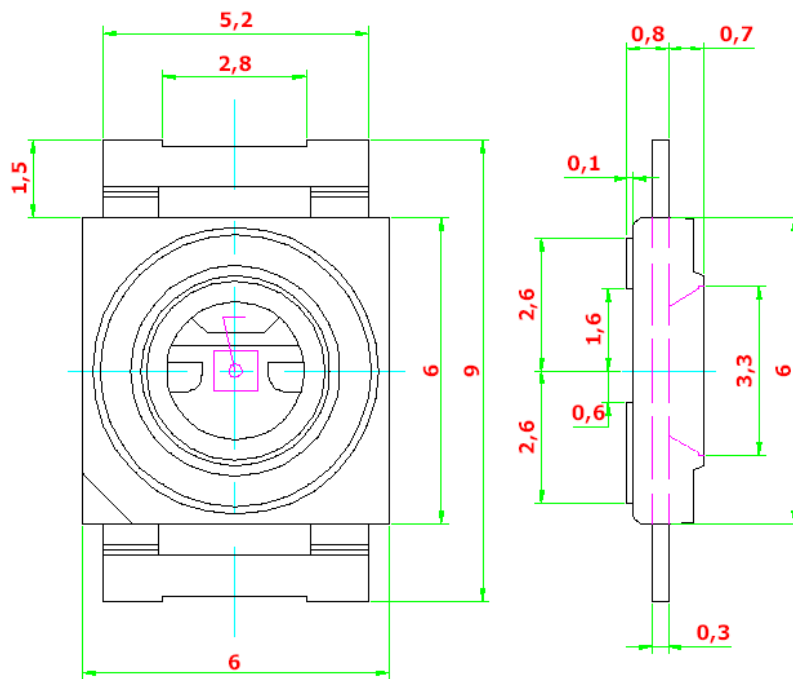




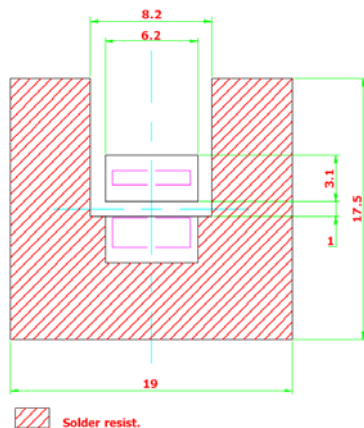
● **Feature:**

1. Super high brightness surface mount LED.
2. High flux output.
3. 120° viewing angle.
4. Compact package outline (LxW) of 6.0 x 6.0 mm. Ultra low height profile – 1.5 mm.
5. Designed for high current drive; typically 175 mA.
6. Low thermal resistance;  $R_{th(j-s)} = 20 \text{ K/W}$ .
7. Compatible to IR reflow soldering.

● **Package Dimension:**

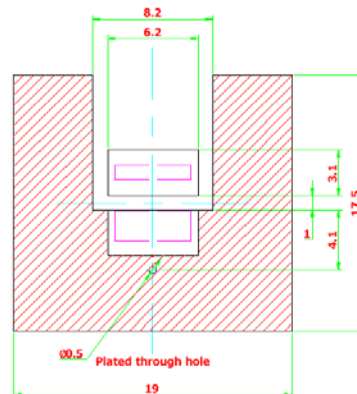


Solder Pad Design



Solder resist.

Recommended Solder Pad Design  
For Better Heat Dissipation.



NOTE:  
Double-sided, full Cu plate 19x17.5 mm on reverse side.



● Optical Characteristics:

at Ta=25°C, If=175mA, Rja=100K/W.

Part Number	IV BINs	Color	Wavelength	Total Flux @ If=175mA		Intensity @ If=175mA	Viewing Angle
			$\lambda_{dom}$ (nm)	Min (mlm)	Typ. (mlm)	Typ. (mcd)	
BL-PPR-SES-C10	W1,W2,X1,X2	Red	625	3500	5000	1800	120
BL-PPY-SES-C10	X1, X2, Y1, Y2	Yellow	589	3500	5500	2000	

IV Bins	Intensity @ If=175mA (mcd)	
	Min	Max
W1	1124	1400
W2	1400	1800
X1	1800	2240
X2	2240	2850
Y1	2850	3550
Y2	3550	4500

Note:

- 1.Luminous intensity is measured with an accuracy of ±11%.
- 2.Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.

● Electrical Characteristics (TA = 25 °C):

		Vf @ If=175mA		Vr @ Ir=100uA
Part Number	Color	Typ. (V)	Max. (V)	Min.(V)
BL-PPR	Red	2.2	2.8	15
BL-PPY	Yellow	2.2	2.8	15

Note: An optional Vf binning is also available upon request. Binning scheme is as per following table.

● Absolute Maximum Ratings:

Parameter	Maximum Value	Unit
DC forward current.	175	mA
Reverse voltage.	15	V
LED junction temperature.	125	°C
Operating temperature.	-40 ... +100	°C
Storage temperature.	-40 ... +100	°C
Power dissipation	525	mW



● **Vf Binning:**

<b>Vf Bin @ 175mA</b>	<b>Forward voltage (V)</b>
Standard	1.9 ... 2.8
01	1.9 ... 2.2
02	2.2 ... 2.5
03	2.5 ... 2.8

Forward voltage, Vf is measured with an accuracy of  $\pm 0.1$  V.

● **Wavelength Grouping:**

<b>Color</b>	<b>Group</b>	<b>Wavelength distribution (nm)</b>
BL-PPR; Red	Full	620 - 630
BL-PPY; Yellow	Full	585 - 597
	W	585 - 588
	X	588 - 591
	Y	591 - 594
	Z	594 - 597

Wavelength is measured with an accuracy of  $\pm 1$  nm.



● Typical electro-optical characteristics curves:

Fig.1 Intensity vs. Forward Current

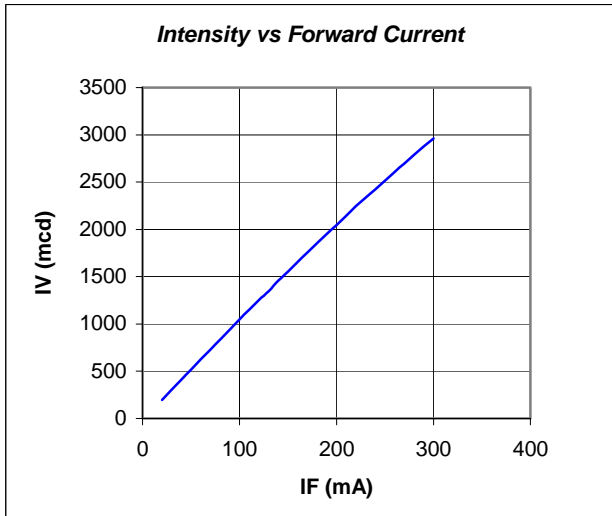


Fig.2 Flux vs. Forward Current

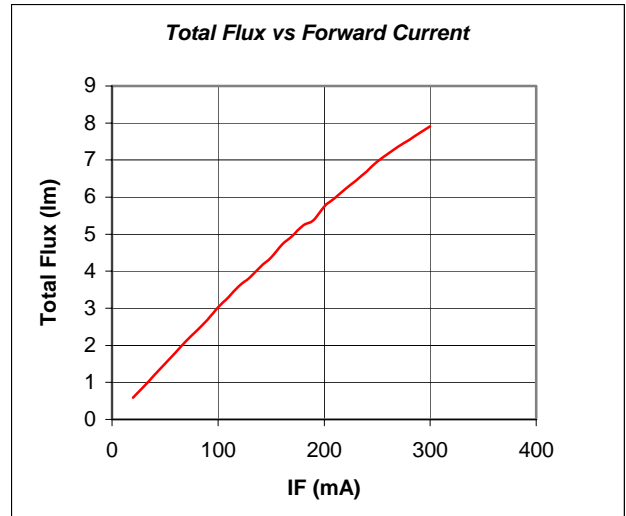


Fig.3 Forward Current vs Forward Voltage

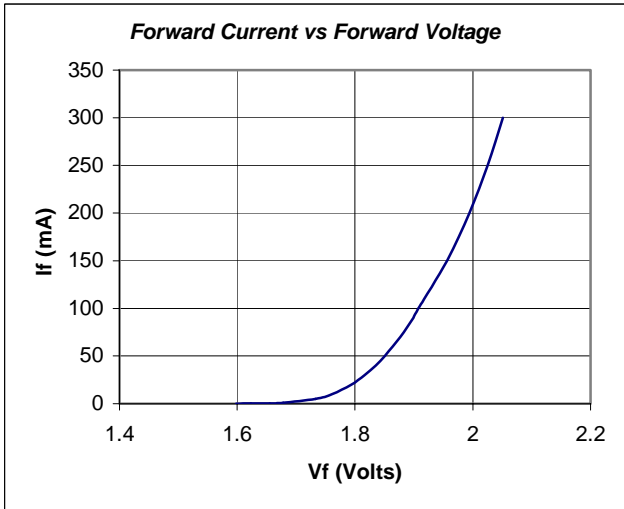


Fig.4 Max Forward Current vs. Ambient Temperature.

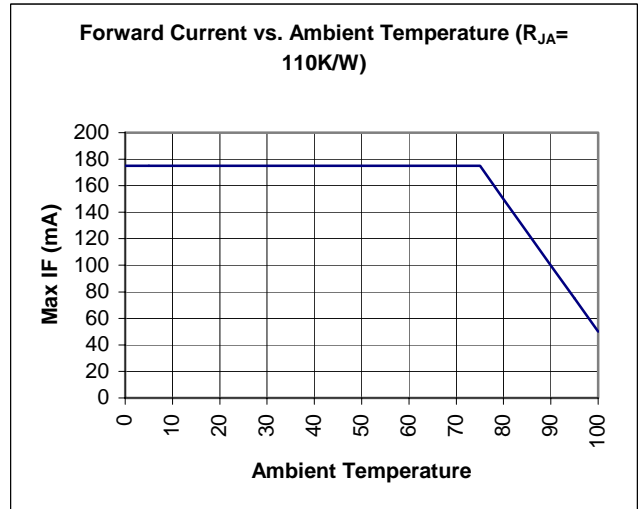


Fig.5 Relative Intensity vs. Wavelength

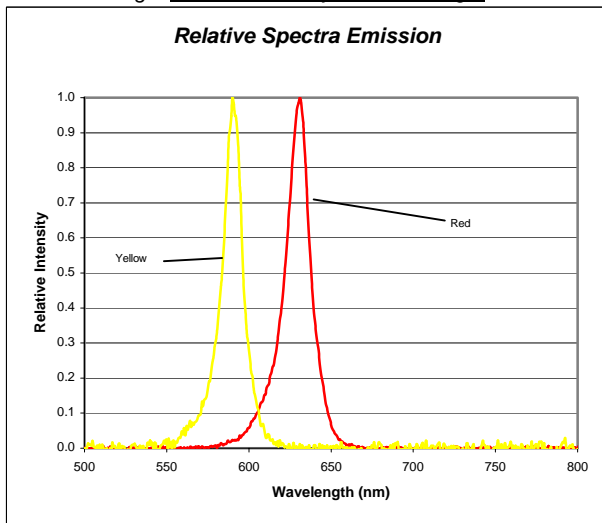


Fig.6 Radiation Pattern.

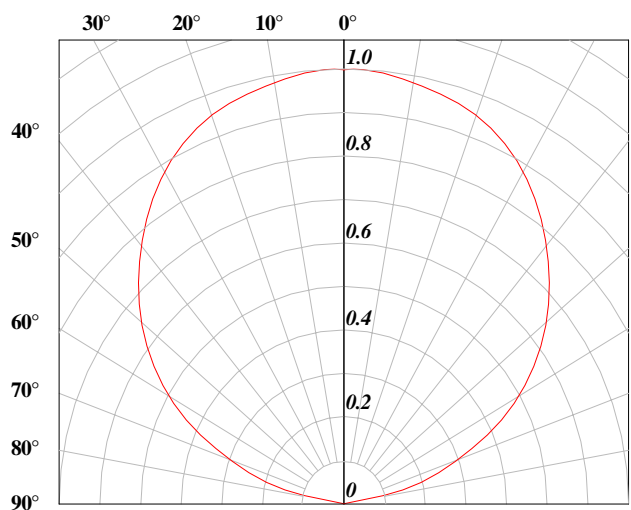
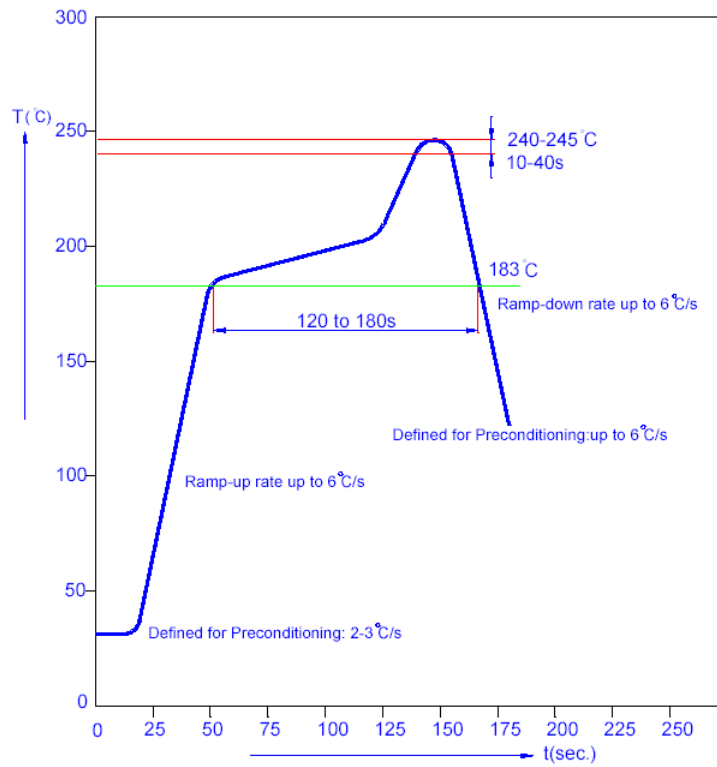




Fig.7 Recommended IR-Reflow Soldering Profile (acc. To IPC 9501).



● Taping And Orientation:

Reels come in quantity of 1000 units.

Reel diameters are 330 mm.

