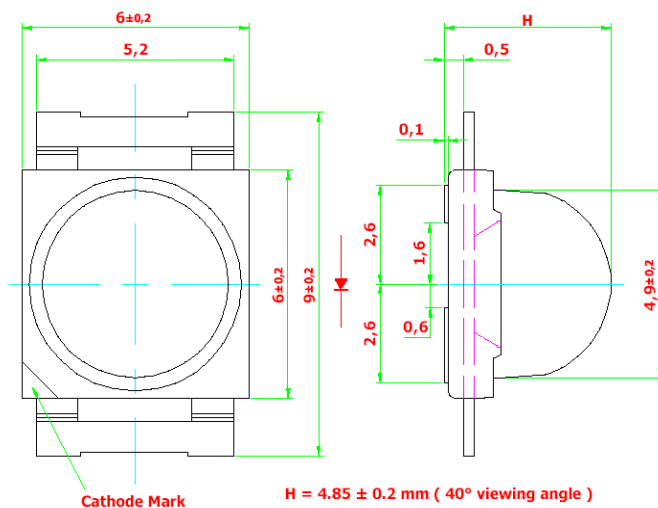




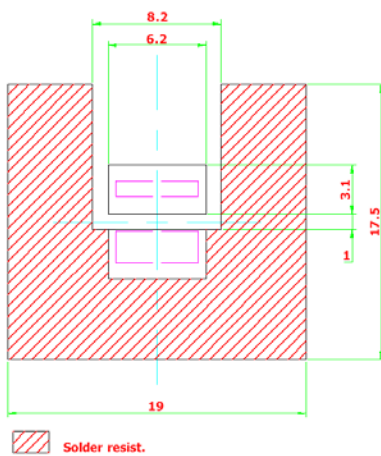
● **Feature:**

1. Super high brightness surface mount LED.
2. High flux output.
3. Available in 40° 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.

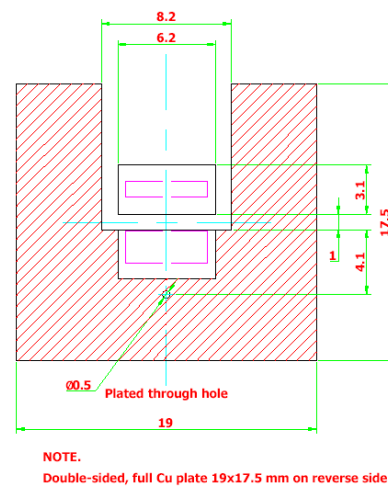
● **Package Dimension:**



Solder Pad Design



**Recommended Solder Pad Design
For Better Heat Dissipation**



Note : Unit to unit pitching must not be less than 25 mm. Metal core circuit board (MCPCB) is highly recommended for high density applications.



● **Optical Characteristics:**

At $T_a=25^\circ\text{C}$, $I_f=175\text{mA}$, $R_{ja}=150\text{K/W}$.

Part Number	Chip Technology / Color	Viewing Angle	Luminous Intensity @ $I_f = 175\text{mA}$, I_v (mcd)
BL-PPR-SE4-C10 <ul style="list-style-type: none"> • BIN Z1 • BIN Z2 • BIN AA 	AllnGaP/ Red	40	4500 ... 9000 4500 ... 5600 5600 ... 7150 7150 ... 9000
BL-PPY-SE4-C10 <ul style="list-style-type: none"> • BIN Z2 • BIN AA • BIN AB 	AllnGaP/ Yellow		5600 ... 11250 5600 ... 7150 7150 ... 9000 9000 ... 11250

Part Number	Color	Wavelength	Total Flux @ $I_f=175\text{mA}$	Viewing Angle
		λ_{dom} (nm)	Typ.(mlm)	
BL-PPR-SE4	Red	625	4500	40
BL-PPY-SE4	Yellow	589	5000	40

IV Bins	Intensity @ $I_f=175\text{mA}$ (mcd)	
	Min	Max
Z1	4500	5600
Z2	5600	7150
AA	7150	9000
AB	9000	11250

NOTE:

1. Luminous intensity is measured with an accuracy of $\pm 11\%$.
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 (At $T_a=25^\circ\text{C}$):**

Part Number	Color	V_f @ $I_f=175\text{mA}$		V_r @ $I_r=100\mu\text{A}$
		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 V_f binning is available upon request.



● **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

● **Wavelength Grouping:**

Color	Group	Wavelength distribution (nm)
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 ± 1 nm.



● **Typical electro-optical characteristics curves:**

Fig. 1 Relative luminous intensity vs. forward current.

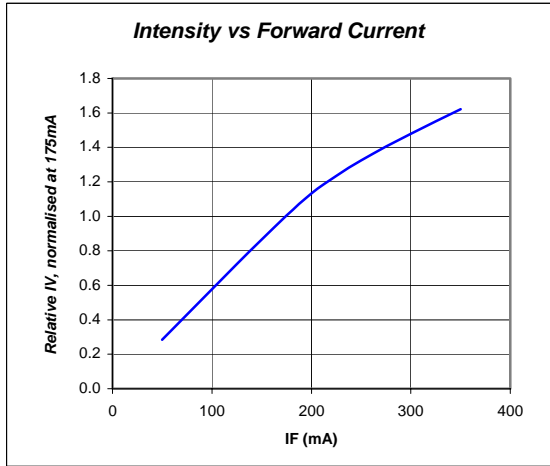


Fig. 2 Forward current vs. forward voltage.

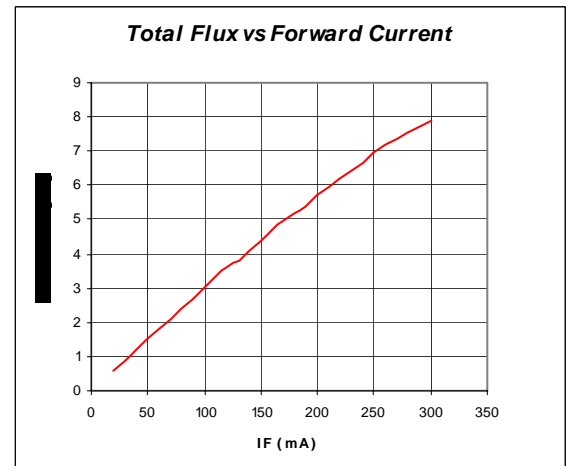


Fig. 3 Radiation pattern.

Fig. 4 Maximum forward current vs. temperature.

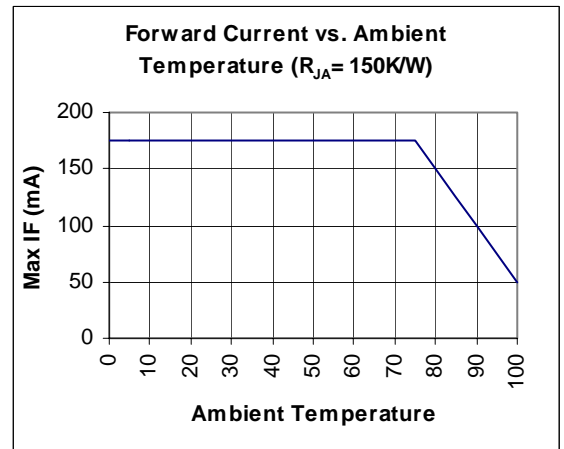
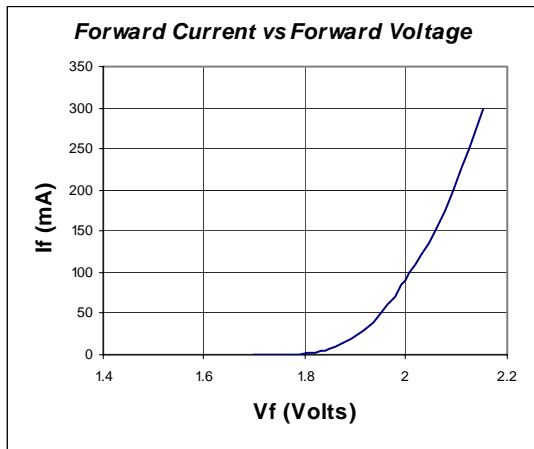


Fig. 5 Relative Intensity vs. Wavelength

Fig. 6 Radiation Pattern.

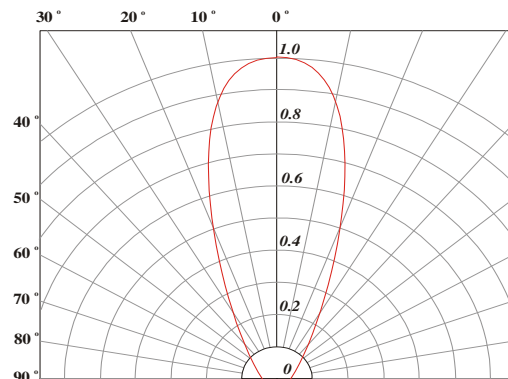
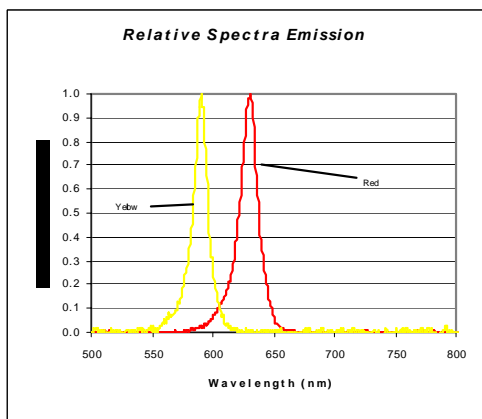
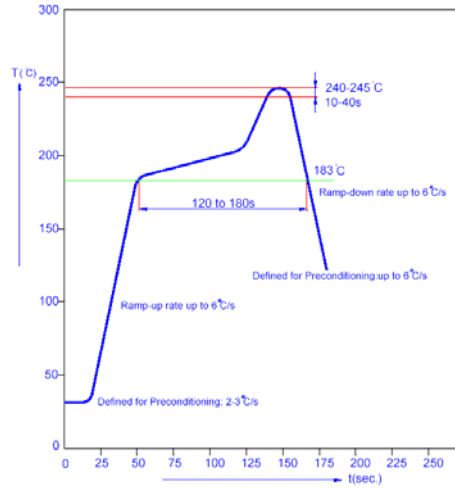




Fig. 7 Recommended IR-Reflow Soldering Profile.



● **Taping And Orientation:**

Reels come in quantity of 1000 units. Reel diameters are 330 mm.

