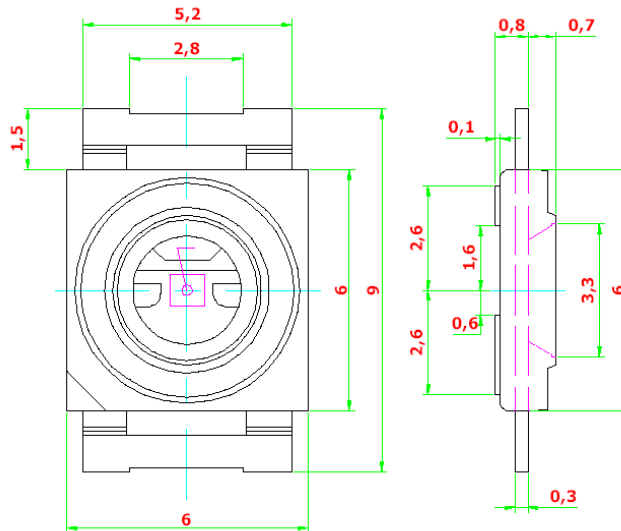




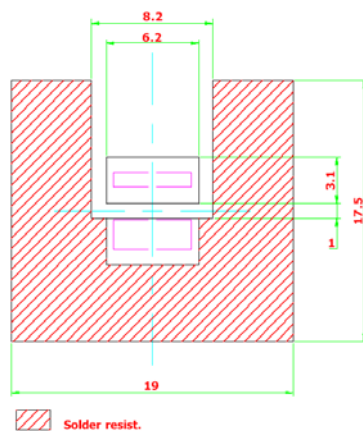
● Feature:

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 50 mA.
6. Low thermal resistance; $R_{th(j-s)} = 20 \text{ K/W}$.
7. Compatible to both IR reflow soldering.

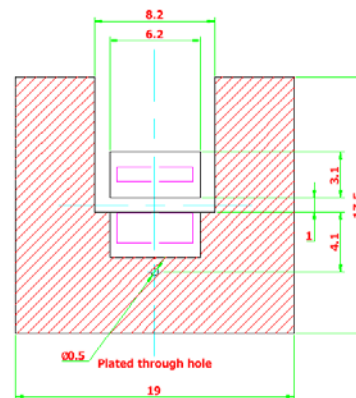
● Package Dimension:



Solder Pad Design



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=50mA, Rja=100K/W.

Part Number	IV BINs	Color	Total Flux @ If=50mA		Intensity @ If=50mA		Viewing Angle
			Min (mlm)	Typ. (mlm)	Min. (mcd)	Typ. (mcd)	
BL-PPW-CED-C10	V1, V2, W1, W2	White	2000	2750	715	1000	120
BL-PPB-CES-C10	S1, S2, T1, T2	Blue	600	700	180	250	
BL-PPT-CES-C10	V1, V2, W1, W2	True Green	2500	3000	715	1000	

IV Bins	Color	Intensity @ If=50mA (mcd)	
		Min	Max
BL-PPW-CED-C10	White		
BIN V1		715	900
BIN V2		900	1125
BIN W1		1125	1400
BIN W2		1400	1800
BL-PPB-CES-C10	Blue/ 470nm		
BIN S1		180	224
BIN S2		224	285
BIN T1		285	355
BIN T2		355	450
BL-PPT-CES-C10	True Green/ 525nm		
BIN V1		715	900
BIN V2		900	1125
BIN W1		1125	1400
BIN W2		1400	1800

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 ($T_A = 25\text{ }^\circ\text{C}$):**

		Vf @ If=50mA		Vr @ Ir=10uA
Part Number	Color	Typ. (V)	Max. (V)	Min.(V)
BL-PPW-CED-C10	White	3.8	4.2	5
BL-PPB-CES-C10	Blue	3.8	4.2	5
BL-PPT-CES-C10	True Green	3.9	4.2	5

● **Absolute Maximum Ratings:**

Parameter	Maximum Value	Unit
DC forward current.	50	mA
Reverse voltage.	5	V
LED junction temperature.	125	$^\circ\text{C}$
Operating temperature.	-40 ... +100	$^\circ\text{C}$
Storage temperature.	-40 ... +100	$^\circ\text{C}$
Power dissipation	250	mW

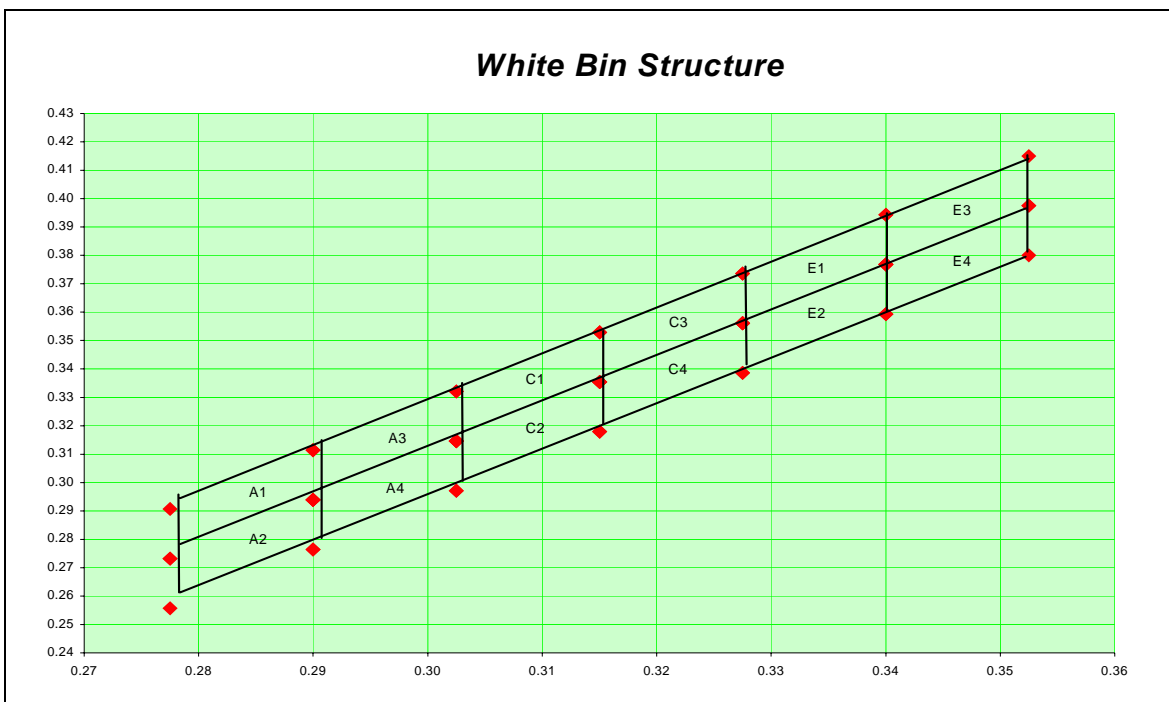
● **Wavelength Grouping:**

Color	Group	Wavelength distribution (nm)
BL-PPB; Blue	Full	464 - 476
	W	464 - 468
	X	468 - 472
	Y	472 - 476
BL-PPT; True Green	Full	519 - 537
	W	519 - 525
	X	525 - 531
	Y	531 - 537

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



● **BL-PPW: White Color Grouping**



Chromaticity coordinate groups are measured with an accuracy of ± 0.01 .

W						X					
Bin		W				Bin		X			
A1	Cx	0.2775	0.2900	0.2900	0.2775	E1	Cx	0.3275	0.3400	0.3400	0.3275
	Cy	0.2732	0.2939	0.3114	0.2907		Cy	0.3561	0.3768	0.3943	0.3736
A2	Cx	0.2775	0.2900	0.2900	0.2775	E2	Cx	0.3275	0.3400	0.3400	0.3275
	Cy	0.2557	0.2764	0.2939	0.2732		Cy	0.3386	0.3593	0.3768	0.3561
A3	Cx	0.2900	0.3025	0.3025	0.2900	E3	Cx	0.3400	0.3525	0.3525	0.3400
	Cy	0.2939	0.3146	0.3321	0.3114		Cy	0.3768	0.3975	0.4150	0.3943
A4	Cx	0.2900	0.3025	0.3025	0.2900	E4	Cx	0.3400	0.3525	0.3525	0.3400
	Cy	0.2764	0.2971	0.3146	0.2939		Cy	0.3593	0.3800	0.3975	0.3768
C1	Cx	0.3025	0.3150	0.3150	0.3025						
	Cy	0.3146	0.3354	0.3529	0.3321						
C2	Cx	0.3025	0.3150	0.3150	0.3025						
	Cy	0.2971	0.3179	0.3354	0.3146						
C3	Cx	0.3150	0.3275	0.3275	0.3150						
	Cy	0.3354	0.3561	0.3736	0.3529						
C4	Cx	0.3150	0.3275	0.3275	0.3150						
	Cy	0.3179	0.3386	0.3561	0.3354						



● Typical electro-optical characteristics curves:

Fig. 1 Relative Luminous Intensity vs. Forward Current. Fig. 2 Relative Luminous Flux vs. Forward Current.

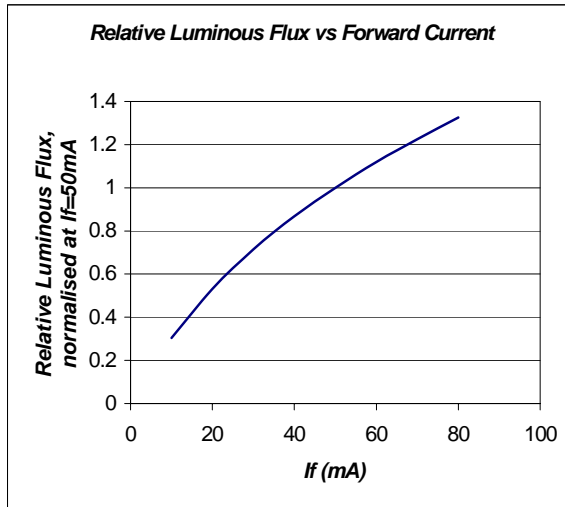
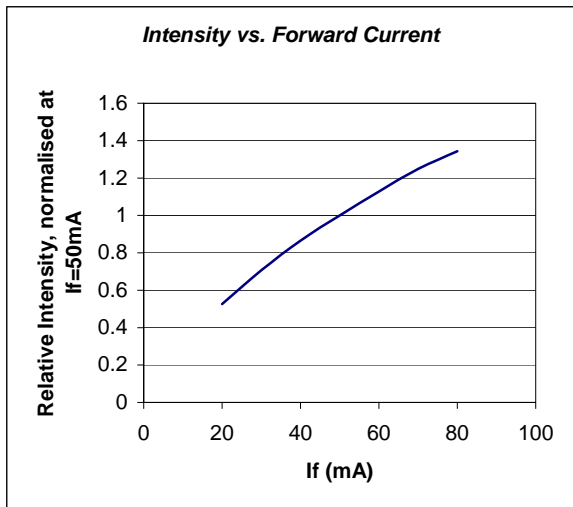


Fig. 3 Forward Current vs. Forward Voltage.

Fig. 4 White Color vs. Forward Current

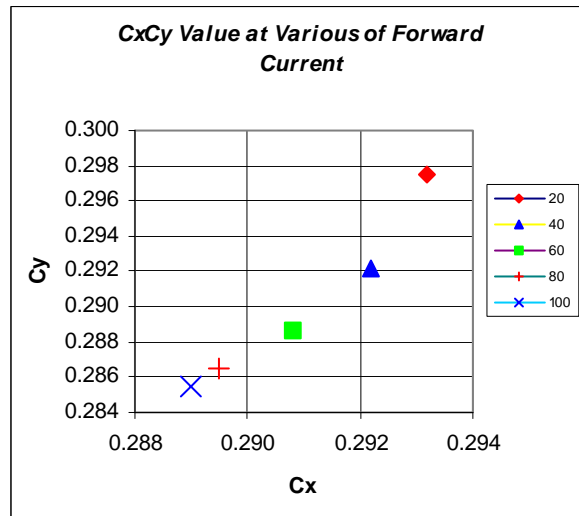
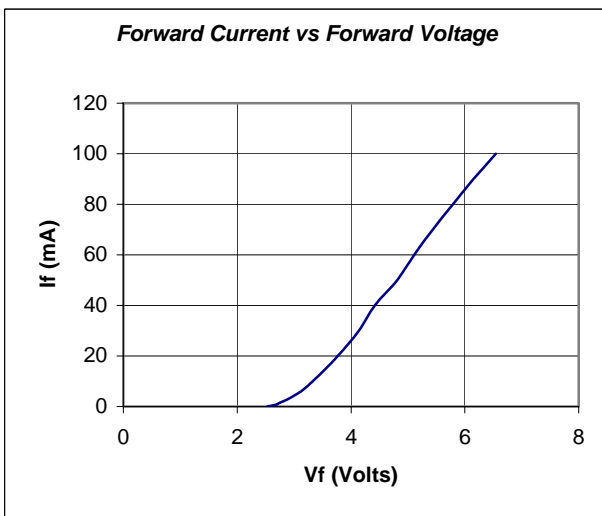


Fig. 5 Radiation pattern.

Fig. 6 Dominant Wavelength vs Forward Current

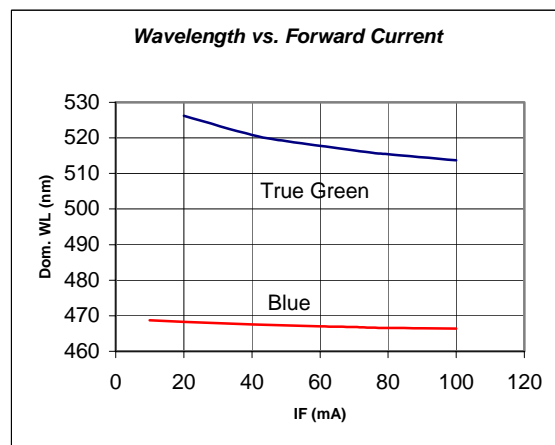
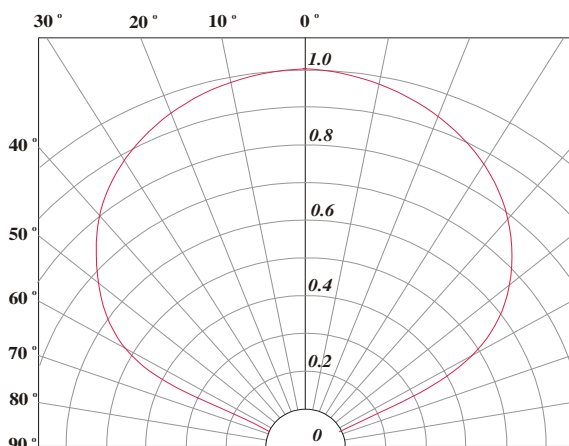
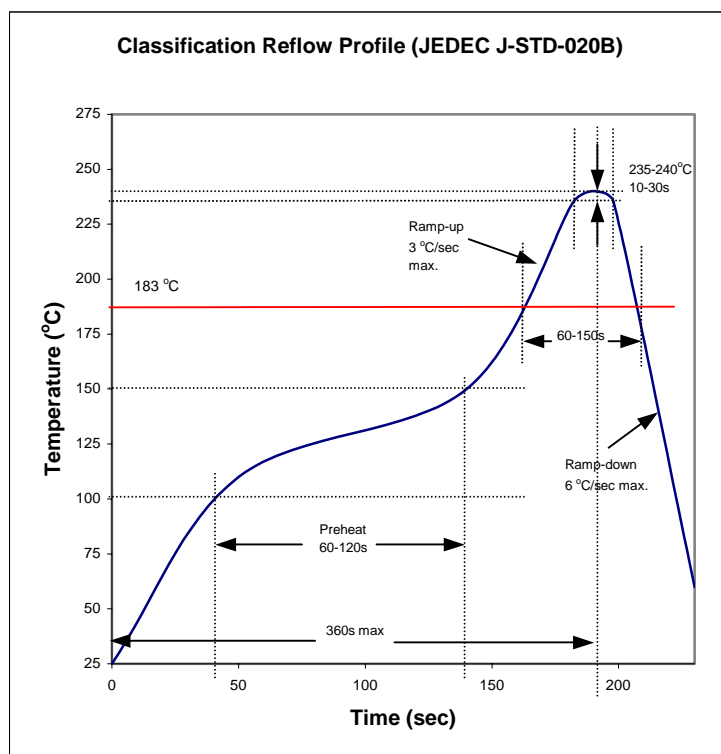




Fig. 7 Recommended IR-Reflow Soldering Profile.



● Taping And Orientation:

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

