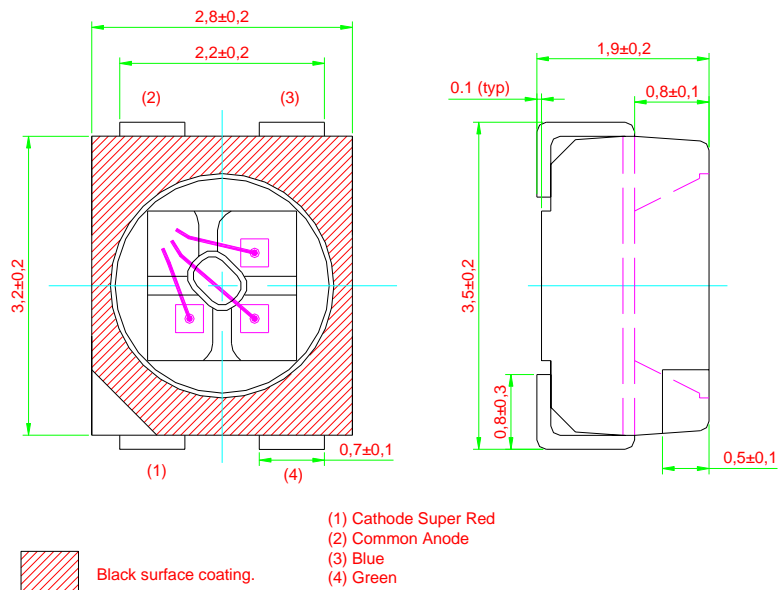




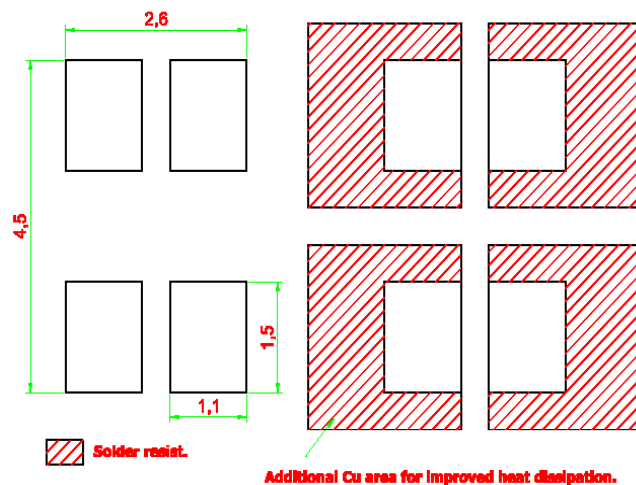
● **Feature:**

1. Low brightness tri-color surface mount LED.
2. Capable for all video-standards. The RGB-LED chips can be controlled separately.
3. 120° viewing angle.
4. Small package outline (LxWxH) of 2.8 x 3.2 x 1.9 mm.
5. Qualified according to JEDEC moisture sensitivity Level 2.
6. Compatible to both IR reflow soldering and TTW soldering.

● **Package Dimension:**



**Recommended Solder Pad**





● **Optical Characteristics:**

Part Number	Color, $\lambda_{dom}$ (nm)			Luminous Intensity @ $I_F=10mA$ (mcd)		
	Chip #1	Chip #2	Chip #3	Chip #1	Chip #2	Chip #3
<b>BL-PMSGB-GJB</b>  <ul style="list-style-type: none"> <li>• BIN H+K+J</li> <li>• BIN H+K+K</li> <li>• BIN H+L+J</li> <li>• BIN H+L+K</li> <li>• BIN J+K+J</li> <li>• BIN J+K+K</li> <li>• BIN J+L+J</li> <li>• BIN J+L+K</li> </ul>	Super Red	Green	Blue	2.80 – 7.20	7.20 – 18.00	4.50 – 11.20
				2.80 – 4.50	7.20 – 11.20	4.50 – 7.20
				2.80 – 4.50	7.20 – 11.20	7.20 – 11.20
				2.80 – 4.50	11.20 – 18.00	4.50 – 7.20
				2.80 – 4.50	11.20 – 18.00	7.20 – 11.20
				4.50 – 7.20	7.20 – 11.20	4.50 – 7.20
				4.50 – 7.20	7.20 – 11.20	7.20 – 11.20
				4.50 – 7.20	11.20 – 18.00	4.50 – 7.20
				4.50 – 7.20	11.20 – 18.00	7.20 – 11.20

	$V_f$ at $I_f=10mA$		View Angle
	Typ.	Max	
Super Red	1.9	2.6	120
Green	2.1	2.6	
Blue	3.9	4.3	

1. Luminous intensity is measured with an accuracy of  $\pm 11\%$ .
2. Wavelength binning is also available as an option. Please refer to the following table for details.

● **Absolute Maximum Ratings:**

Parameter	Maximum Value	Unit
DC forward current.	20	mA
Peak pulse current. ( $t_p \leq 10 \mu s$ , Duty cycle = 0.005)	200	mA
Reverse voltage.	5	V
LED junction temperature.	100	$^{\circ}C$
Operating temperature.	-40 ... +100	$^{\circ}C$
Storage temperature.	-40 ... +100	$^{\circ}C$



● **Wavelength Grouping:**

If wavelength binning is required, only one wavelength group is allowed for each chip within a reel.

Color	Group	Wavelength distribution (nm)
Super Red	Full	620 – 635
Green	Full	565 - 577
	W	565 - 569
	X	569 - 573
Blue	Y	573 – 577
	Full	464 - 476
	W	464 - 468
	X	468 - 472
	Y	472 – 476

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

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

*Fig. 1&2 Forward current vs. forward voltage.*

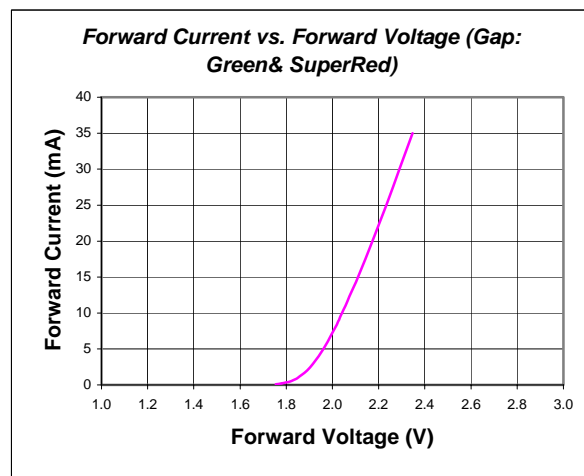
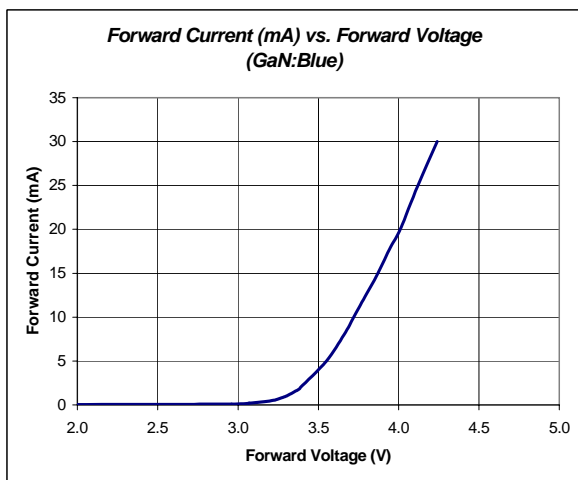


Fig. 3 Radiation pattern.

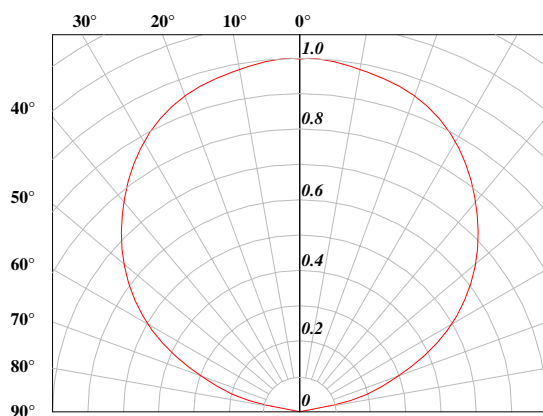


Fig. 4 Maximum forward current vs. ambient temperature

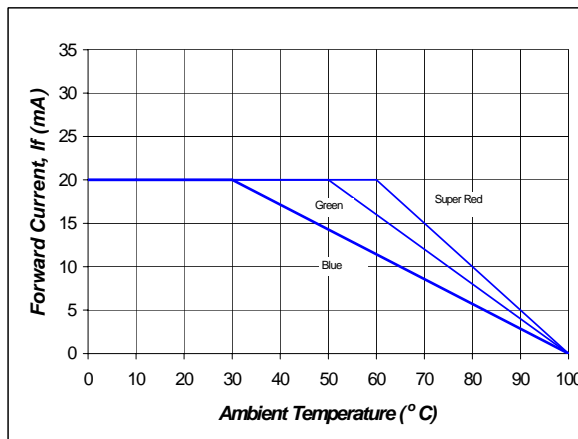




Fig.5 Recommended IR-reflow Soldering Profile (acc. To IPC 9501).

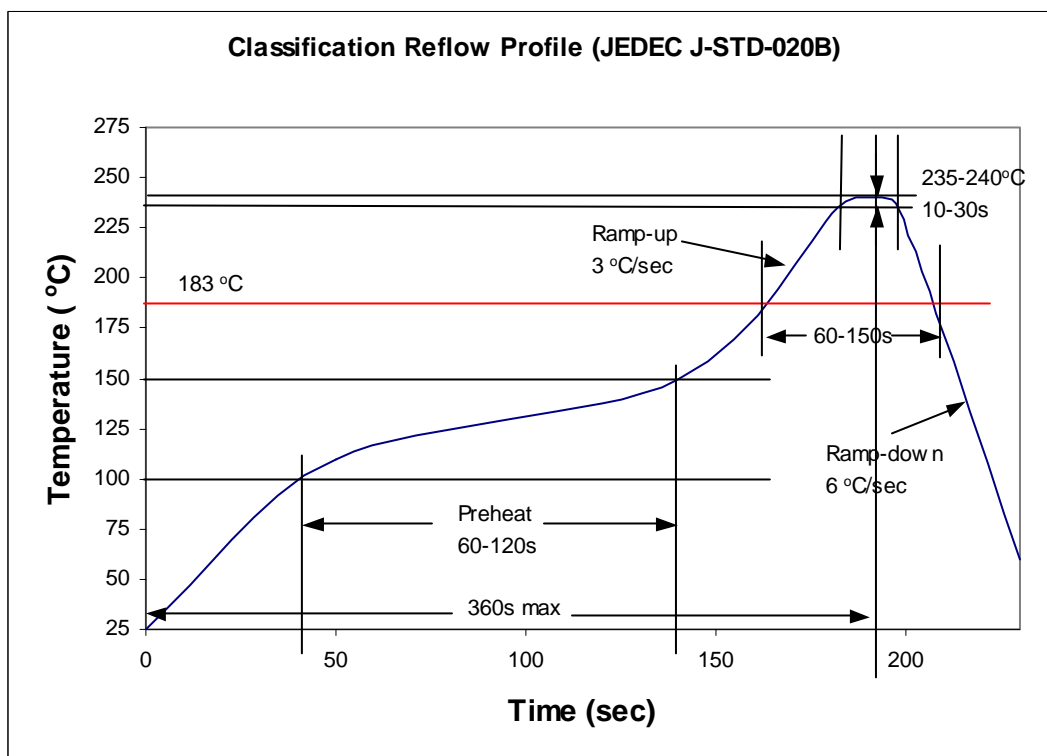
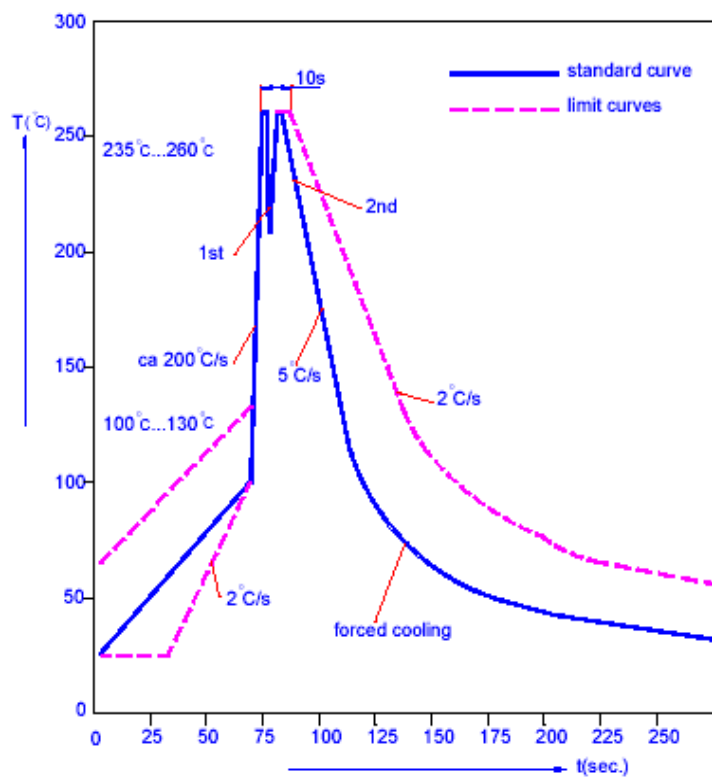


Fig. 6 Recommended TTW Soldering Profile (acc. to CECC 00802).

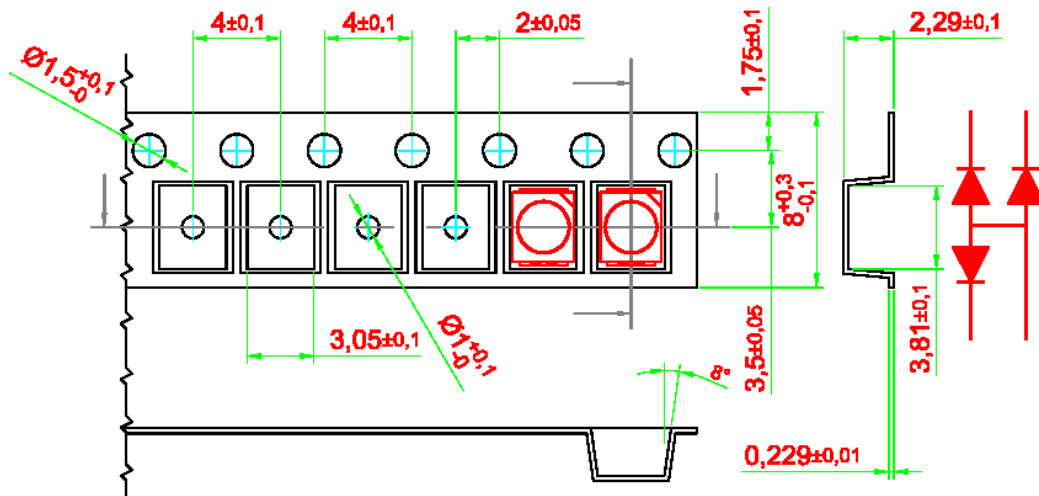




● Taping And Orientation:

Reels come in quantity of 8000 units or 2000 units.

Reel diameters are 330 mm and 180 mm respectively.



200 mm min. for Ø180 reel.  
200 mm min. for Ø330 reel.

480 mm min. for Ø180 reel.  
960 mm min. for Ø330 reel.

