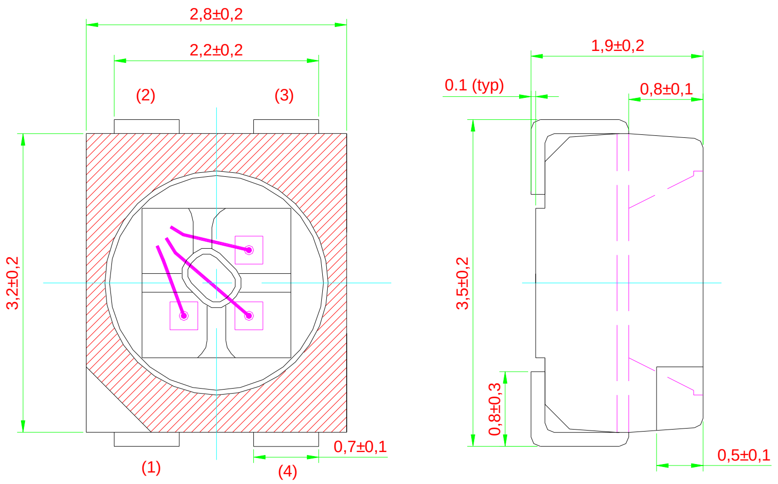
Feature:

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.

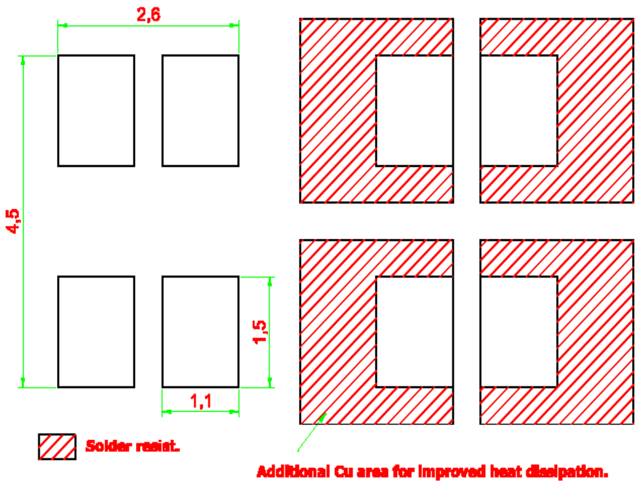
Package Dimension:



▨ Black surface coating.

(1) Cathode Super Red
(2) Common Anode
(3) Blue
(4) Green

Recommended Solder Pad



Optical Characteristics:

Part Number	**Color, λ_{dom} (nm)**			**Luminous Intensity @ IF=10mA (mcd)**		
	Chip #1	**Chip #2**	**Chip #3**	**Chip #1**	**Chip #2**	**Chip #3**
	Super Red	**Green**	**Blue**			
BL-PMSGB-GJB				**2.80 – 7.20**	**7.20 – 18.00**	**4.50 – 11.20**
• BIN H+K+J				2.80 – 4.50	7.20 –11.20	4.50 – 7.20
• BIN H+K+K				2.80 – 4.50	7.20 – 11.20	7.20 – 11.20
• BIN H+L+J				2.80 – 4.50	11.20 – 18.00	4.50 – 7.20
• BIN H+L+K				2.80 – 4.50	11.20 – 18.00	7.20 – 11.20
• BIN J+K+J				4.50 – 7.20	7.20 – 11.20	4.50 – 7.20
• BIN J+K+K				4.50 – 7.20	7.20 – 11.20	7.20 – 11.20
• BIN J+L+J				4.50 – 7.20	11.20 – 18.00	4.50 – 7.20
• BIN J+L+K				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 ±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. (tp ≤ 10 μs, Duty cycle = 0.005)	200	mA
Reverse voltage.	5	V
LED junction temperature.	100	°C
Operating temperature.	-40 … +100	°C
Storage temperature.	-40 … +100	°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 W X Y	565 - 577 565 - 569 569 - 573 573 – 577
Blue	Full W X Y	464 - 476 464 - 468 468 - 472 472 – 476

Wavelength is measured with an accuracy of ±1 nm.

Typical electro-optical characteristics curves:

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

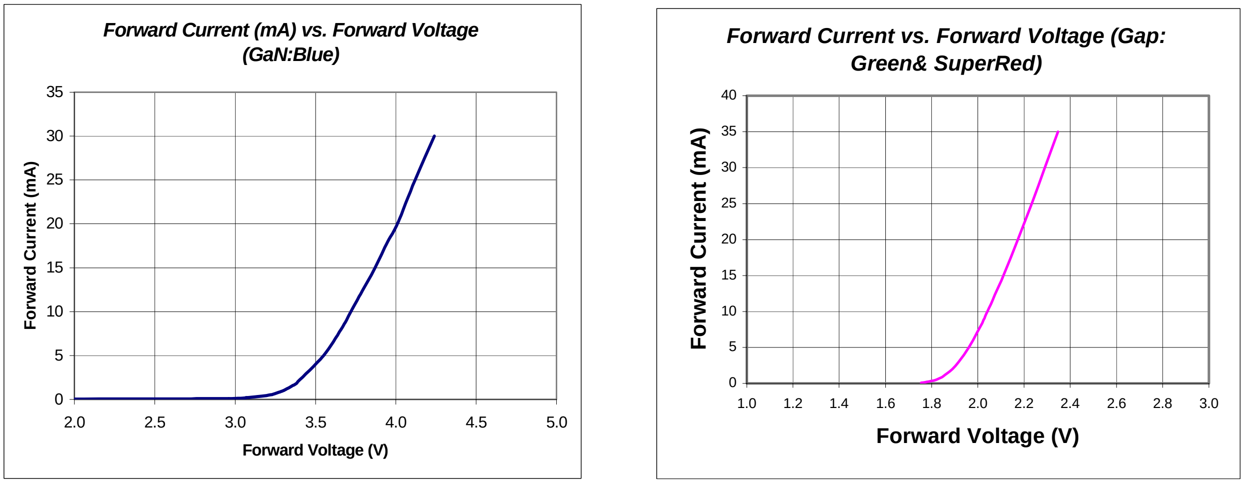


Fig. 3 Radiation pattern.

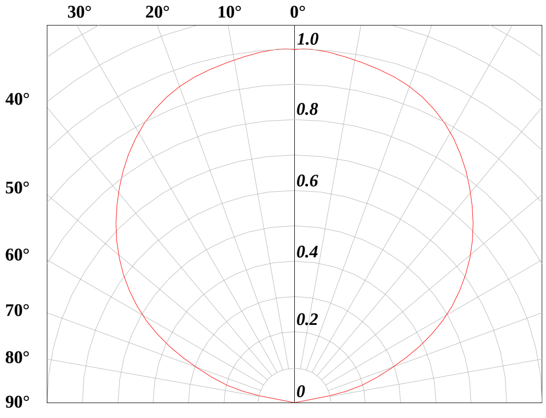


Fig. 4 Maximum forward current vs. ambient temperature

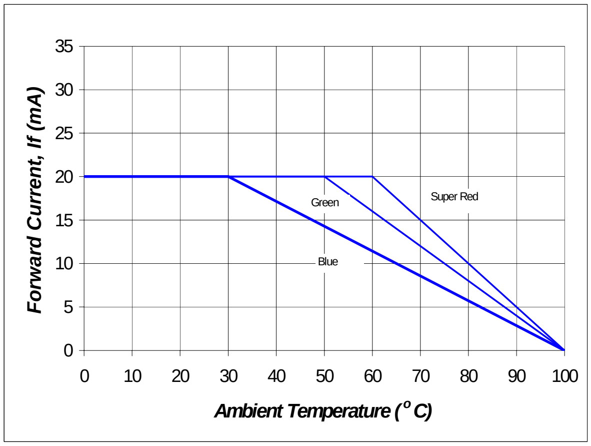


Fig.5 Recommended IR-reflow Soldering Profile (acc. To IPC 9501).

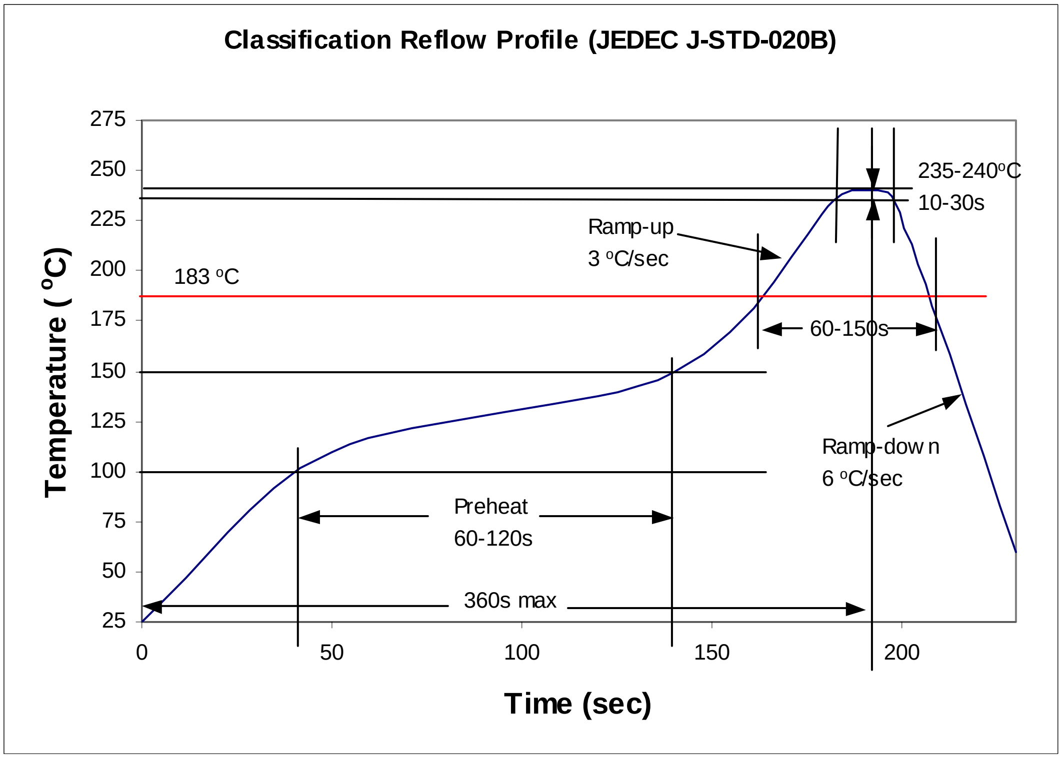
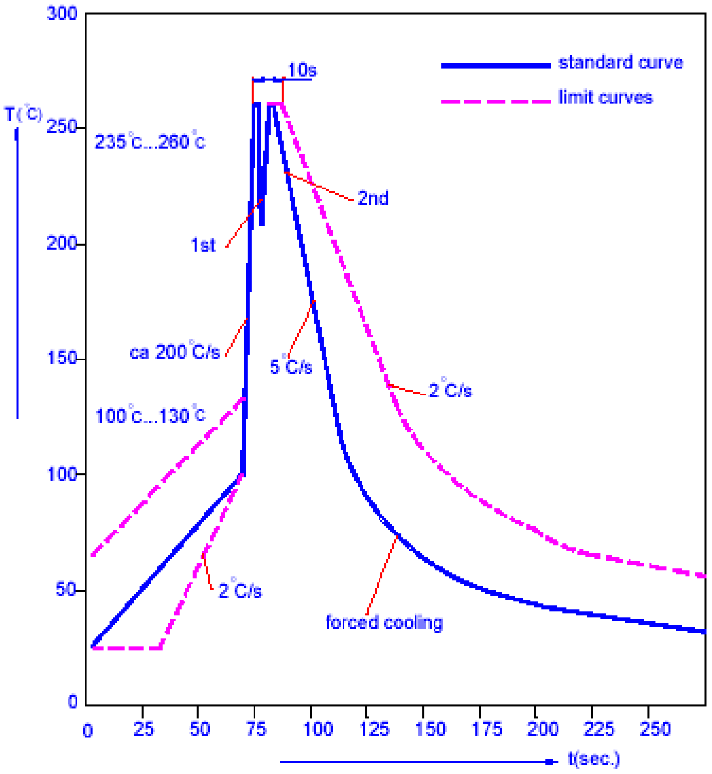


Fig. 6 Recommended TTW Soldering Profile (acc. to CECC 00802).



- **Taping And Orientation:**

Reels come in quantity of 8000 units or 2000 units.

Reel diameters are 330 mm and 180 mm respectively.