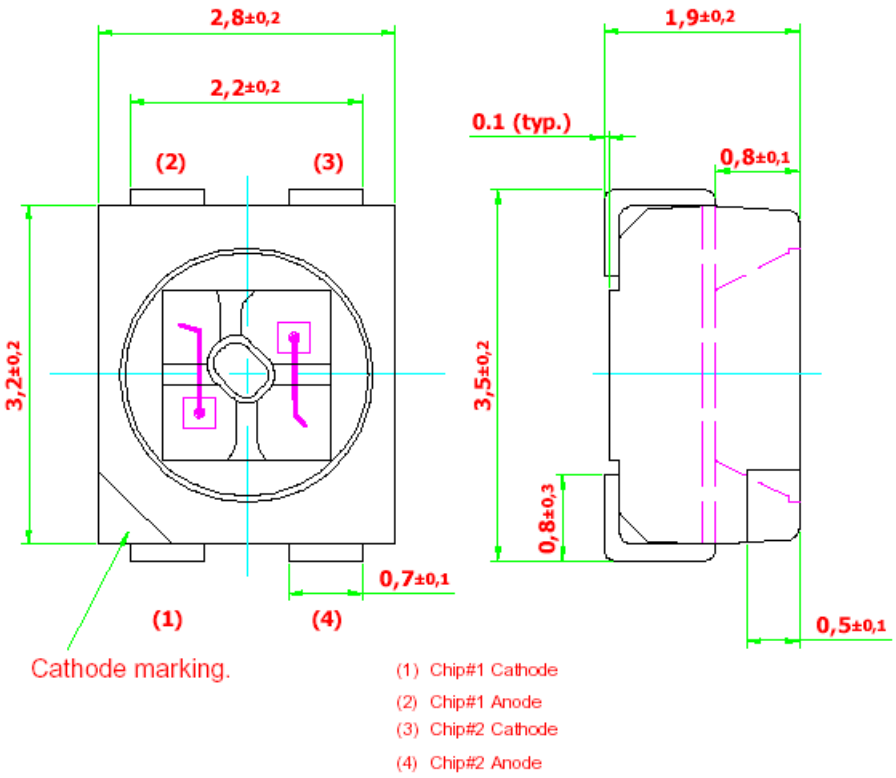
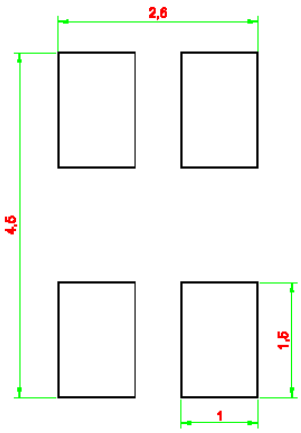
- **Feature:**

1. High brightness bi-color surface mount LED.
2. 120° viewing angle.
3. Small package outline (LxWxH) of 2.8 x 3.2 x 1.9 mm.
4. Qualified according to JEDEC moisture sensitivity Level 2.
5. Compatible to both IR reflow soldering and TTW soldering.

- **Package Dimension:**



Recommended Solder Pad



● Optical Characteristics:

Part Number	Color λ_{dom} (nm)		Luminous Intensity @ If = 20mA . Iv (mcd)	
	Chip#1	Chip#2	Chip#1	Chip#2
BL-PMRG-SJS	Red 625	Green 570	**112.5 … 285.0**	**71.5 … 180.0**
• BIN R Q			112.5 … 180.0	71.5 … 112.5
• BIN R R			112.5 … 180.0	112.5 … 180.0
• BIN S Q			180.0…..285.0	71.5 … 112.5
• BIN S R			180.0… 285.0	112.5 … 180.0
BL-PMSG-CJS	Super Red 632	Green 570	**71.5 … 180.0**	**45.0 … 112.5**
• BIN Q P			71.5 … 112.5	45.0 … 71.5
• BIN Q Q			71.5 … 112.5	71.5 … 112.5
• BIN R P			112.5 180.0	45.0 … 71.5
• BIN R Q			112.5 180.0	71.5 … 112.5
BL-PMST-CJS	Super Red 632	True Green 525	**45.0 … 112.5**	**112.5 … 285.0**
• BIN P R			45.0 … 71.5	112.5 … 180.0
• BIN P S			45.0 … 71.5	180.0 … 285.0
• BIN Q R			71.5 … 112.5	112.5 … 180.0
• BIN Q S			71.5 … 112.5	180.0 … 285.0
BL-PMSY-CJS	Super Red 632	Yellow 587	**45.0 … 112.5**	**112.5 … 285.0**
• BIN P R			45.0 … 71.5	112.5 … 180.0
• BIN P S			45.0 … 71.5	180.0 … 285.0
• BIN Q R			71.5 … 112.5	112.5 … 180.0
• BIN Q S			71.5 … 112.5	180.0 … 285.0
BL-PMYB-CJS	Yellow 587	Blue 470	**112.5 … 285.0**	**45.0 … 112.5**
• BIN R P			112.5 … 180.0	45.0 … 71.5
• BIN R Q			112.5 … 180.0	71.5 … 112.5
• BIN S P			180.0 … 285.0	45.0 … 71.5
• BIN S Q			180.0 … 285.0	71.5 … 112.5
BL-PMYT-CJS	Yellow 587	True Green 525	**112.5 … 285.0**	**112.5 … 285.0**
• BIN R R			112.5 … 180.0	112.5 … 180.0
• BIN R S			180.0 … 285.0	180.0 … 285.0
• BIN S R			112.5 … 180.0	112.5 … 180.0
• BIN S S			180.0 … 285.0	180.0 … 285.0

NOTE:
1. Luminous intensity is measured with an accuracy of ±11%.

- **Absolute Maximum Ratings:**

Parameter	Maximum Value		Unit
DC forward current.	AS AlInGaP 30	InGaN 20	mA
Peak pulse current. (tp ≤ 10 μs, Duty cycle = 0.005)	AS AlInGaP 1000	InGaN 200	mA
Reverse voltage.	5		V
LED junction temperature.	125		°C
Operating temperature.	-40 … +100		°C
Storage temperature.	-40 … +100		°C

- **Optical Characteristics (T_A = 25 °C):**

	V_f at I_f=20mA		View Angle
	Typ.	Max	
Red	2.2	2.45	120
Super Red	2.2	2.45	
Green	2.2	2.45	
True Green	3.7	4.25	
Blue	3.7	4.25	

- **Vf Binning:**

Vf Bin @ 20mA	**Red, Yellow, Green; AlInGaP (V)**	**True Green & Blue InGaN (V)**
00	1.25 … 1.55	3.05 … 3.35
01	1.55 … 1.85	3.35 … 3.65
02	1.85 … 2.15	3.65 … 3.95
03	2.15 … 2.45	3.95 … 4.25

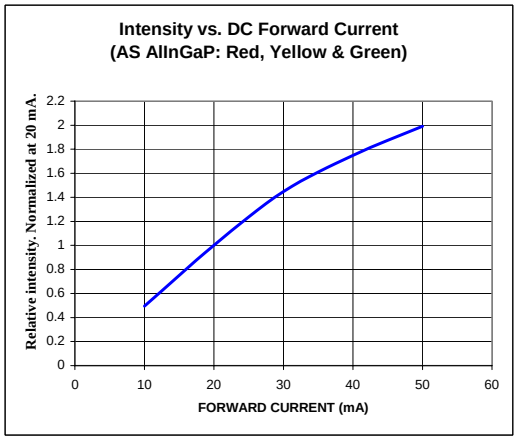
Forward voltage, Vf is measured with an accuracy of ±0.1 V.

- **Wavelength Grouping:**

Color	Group	Wavelength distribution (nm)
Super-red	Full	625 – 640
Red	Full	620 - 630
Yellow	Full	582 – 594
	W	582 – 585
	X	585 – 588
	Y	588 - 591
	Z	591 - 594
Green	Full	564.5 – 576.5
	W	564.5 – 567.5
	X	567.5 – 570.5
	Y	570.5 – 573.5
	Z	573.5 – 576.5
True Green	Full	520 - 536
	W	520 - 524
	X	524 - 528
	Y	528 - 532
	Z	532 - 536
Blue	Full	464 - 476
	W	464 - 468
	X	468 - 472
	Y	472 - 476

Typical electro-optical characteristics curves:

Fig. 1 Relative luminous intensity vs. forward current.



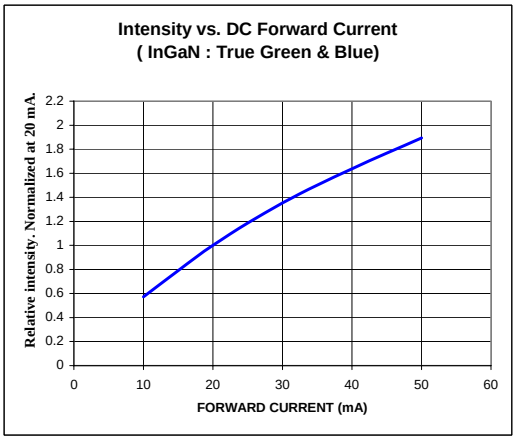
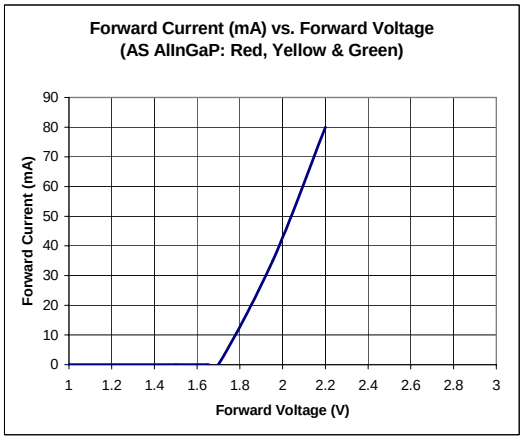


Fig. 2 Forward current vs. forward voltage



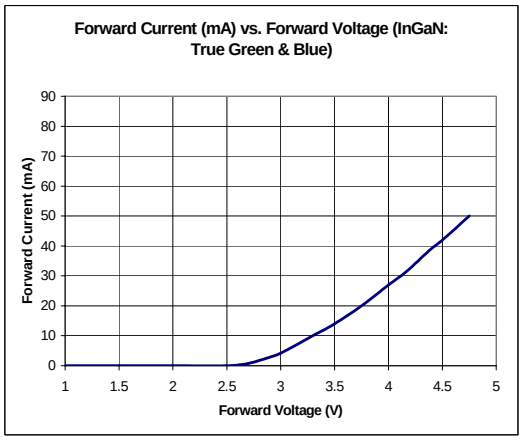


Fig. 3 Radiation pattern.

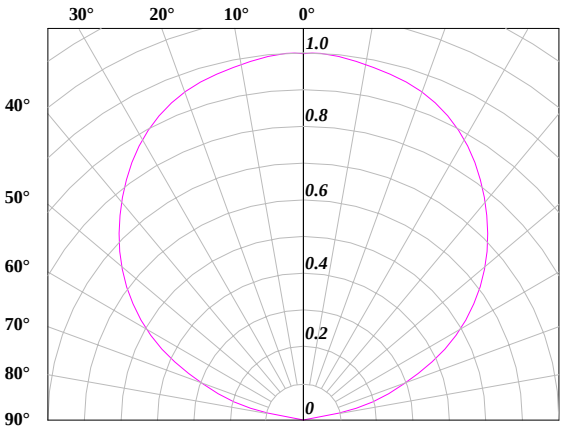


Fig. 4 Maximum forward current vs. temperature

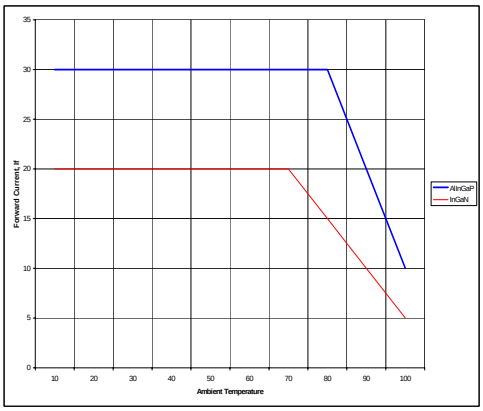


Fig. 5 Recommended IR-reflow Soldering Profile

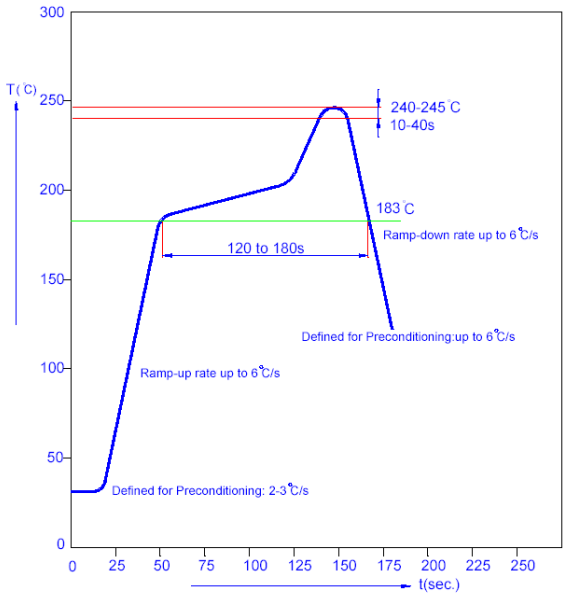
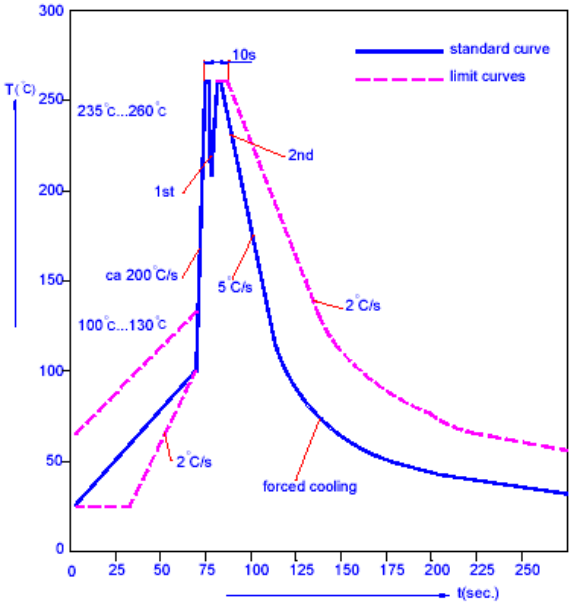


Fig. 6 Recommended TTW Soldering Profile



- **Taping And Orientation:** Reels come in quantity of 2000 units. Reel diameters is180 mm.

