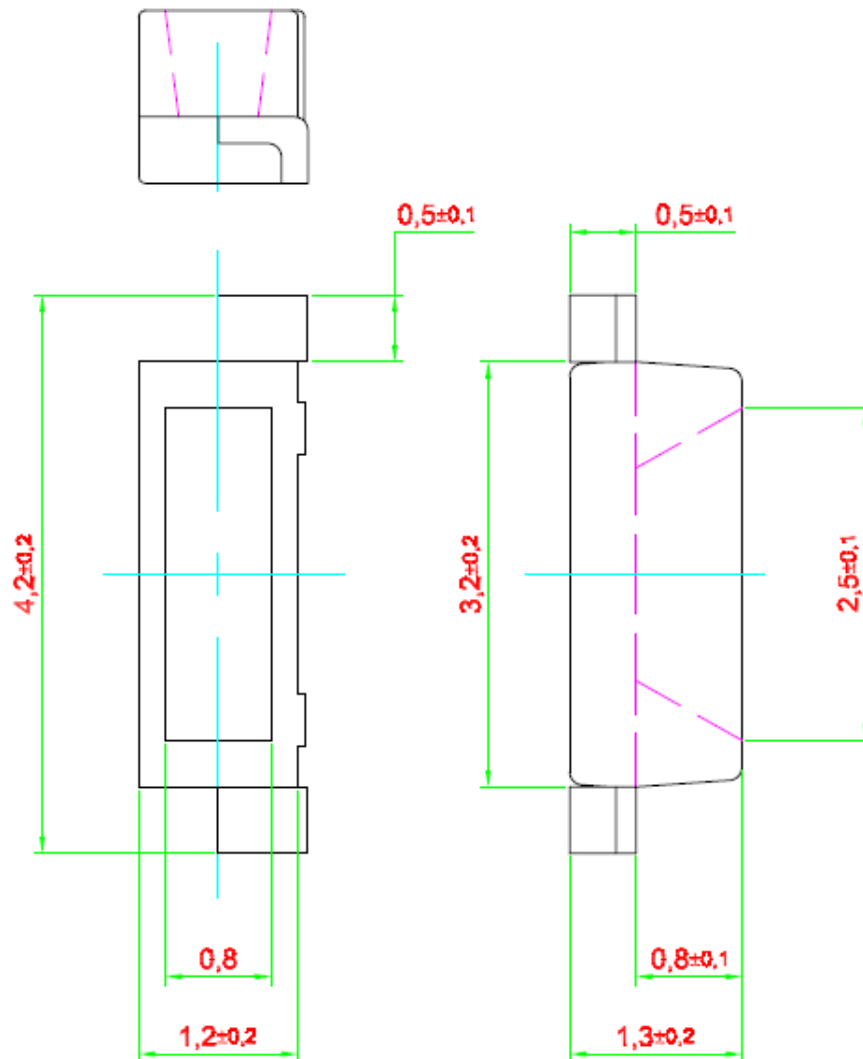




DomiLED Right Angle AlInGaP : BL-PSx-xSS



- High brightness surface mount LED.
- Designed for sideways illumination.
- Small package outline.
- Qualified according to JEDEC moisture sensitivity Level 2.
- Compatible to both IR reflow soldering and TTW soldering.



Part Ordering Number	Chip Technology Color	λ_{dom} (nm)	Luminous Intensity @ If = 20mA lv (mcd)
BL-PSS-SSS-C10 - BIN P1 - BIN P2 - BIN Q1 - BIN Q2	AlInGaP / Super-red, 632 nm	120	45.0 ... 112.5 45.0 ... 56.0 56.0 ... 71.5 71.5 ... 90.0 90.0 ... 112.5
BL-PSR-CSS-C20 - BIN P1 - BIN P2 - BIN Q1 - BIN Q2 (OBSOLETE) BL-PSR-CSS-C10 - BIN Q1 - BIN Q2 - BIN R1 - BIN R2 BL-PSR-SSS-C20 - BIN Q1 - BIN Q2 - BIN R1 - BIN R2 (OBSOLETE)	AlInGaP / Red, 625 nm	120	45.0 ... 112.5 45.0 ... 56.0 56.0 ... 71.5 71.5 ... 90.0 90.0 ... 112.5 71.5 ... 180.0 71.5 ... 90.0 90.0 ... 112.5 112.5 ... 140.0 140.0 ... 180.0 71.5 ... 180.0 71.5 ... 90.0 90.0 ... 112.5 112.5 ... 140.0 140.0 ... 180.0
BL-PSR-TSS-C10 - BIN S1 - BIN S2 - BIN T1 - BIN T2	TS AlInGaP / Red, 625 nm		180.0 ... 450.0 180.0 ... 224.0 224.0 ... 285.0 285.0 ... 355.0 355.0 ... 450.0
BL-PSA-CSS-C10 - BIN Q1 - BIN Q2 - BIN R1 - BIN R2 BL-PSA-SSS-C10 - BIN R1 - BIN R2 - BIN S1 - BIN S2	AlInGaP / Amber, 615 nm	120	71.5 ... 180.0 71.5 ... 90.0 90.0 ... 112.5 112.5 ... 140.0 140.0 ... 180.0 112.5 ... 285.0 112.5 ... 140.0 140.0 ... 180.0 180.0 ... 224.0 224.0 ... 285.0



Part Ordering Number	Chip Technology Color	λ_{dom} (nm)	Luminous Intensity @ If = 20mA Iv (mcd)
BL-PSO-CSS-C10 - BIN Q1 - BIN Q2 - BIN R1 - BIN R2	AlInGaP / Orange, 605 nm	120	71.5 ... 180.0 71.5 ... 90.0 90.0 ... 112.5 112.5 ... 140.0 140.0 ... 180.0
BL-PSO-SSS-C10 - BIN R1 - BIN R2 - BIN S1 - BIN S2			112.5 ... 285.0 112.5 ... 140.0 140.0 ... 180.0 180.0 ... 224.0 224.0 ... 285.0
BL-PSY-CSS-C10 - BIN Q1 - BIN Q2 - BIN R1 - BIN R2	AlInGaP / Yellow, 587 nm	120	71.5 ... 180.0 71.5 ... 90.0 90.0 ... 112.5 112.5 ... 140.0 140.0 ... 180.0
BL-PSY-SSS-C10 - BIN R1 - BIN R2 - BIN S1 - BIN S2			112.5 ... 285.0 112.5 ... 140.0 140.0 ... 180.0 180.0 ... 224.0 224.0 ... 285.0
BL-PSG-SSS-C10 - BIN P1 - BIN P2 - BIN Q1 - BIN Q2	AlInGaP / Green, 572 nm	120	45.0 ... 90.0 45.0 ... 56.0 56.0 ... 71.5 71.5 ... 90.0 90.0 ... 112.5

NOTE:

1. All part number above comes in a standard quantity of 2500 units per reel.
2. Other luminous intensity groups are also available upon request.
3. Luminous intensity is measured with an accuracy of $\pm 11\%$.
4. Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.
5. Vf binning is optional. Vf binning scheme is as per the following table. Please contact marketing for special part number.

**Wavelength Grouping.**

Color	Group	Wavelength distribution (nm)
BL-PSS; Super Red	Full	625 - 640
BL-PSR-CS, -SS; Red (AS)	Full	620 – 630
BL-PSR-TS; Red (TS)		620 - 635
BL-PSA; Amber	Full	610 – 621
	W	610 – 615
	X	615 – 621
BL-PSO; Orange	Full	600 – 612
	W	600 – 603
	X	603 – 606
	Y	606 - 609
	Z	609 - 612
BL-PSY; Yellow	Full	582 - 594
	W	582 - 585
	X	585 - 588
	Y	588 - 591
	Z	591 - 594
BL-PSG; 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

Dominant wavelength is measured with an accuracy of ± 1 nm.

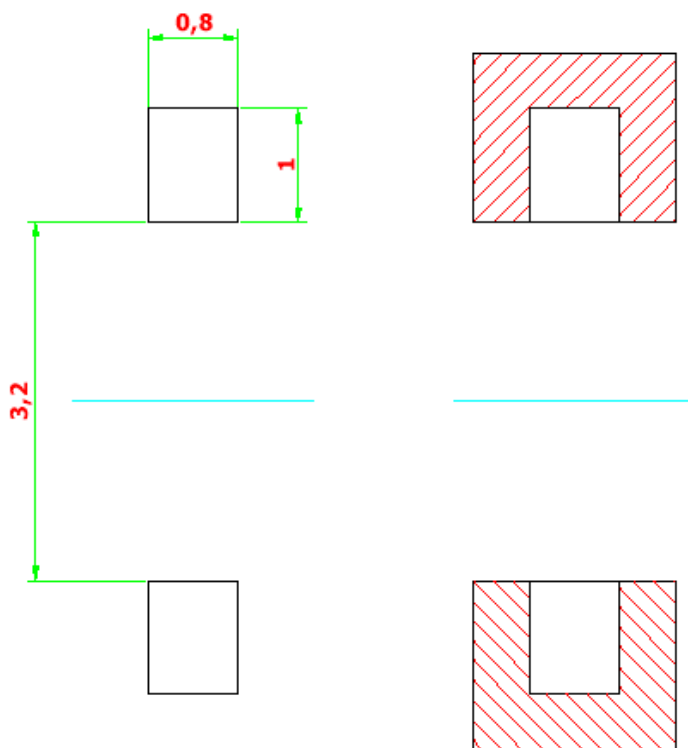
Vf Binning (Optional).

Vf Bin @ 20mA	Forward voltage (V)
01	1.55 ... 1.85
02	1.85 ... 2.15
03	2.15 ... 2.45
04	2.45 ... 2.75

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

**Absolute Maximum Ratings**

	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.	12	V
ESD Threshold; HBM	2000	V
LED junction temperature.	125	°C
Operating temperature.	-40 ... +100	°C
Storage temperature.	-40 ... +100	°C
Power dissipation (at room temperature)	50	mW

Recommended Solder Pad

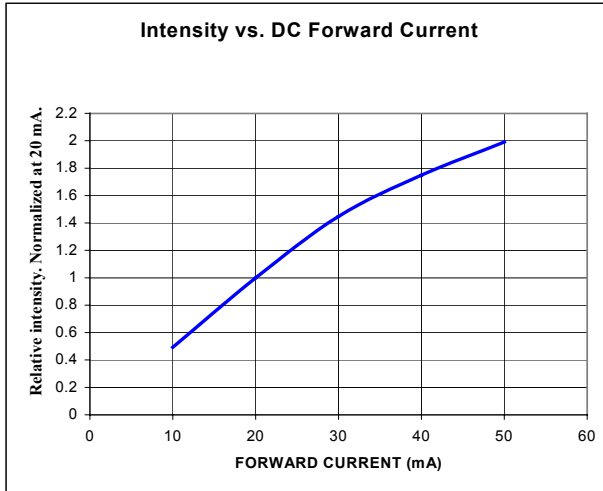
**Pad design for better
heat dissipation.**



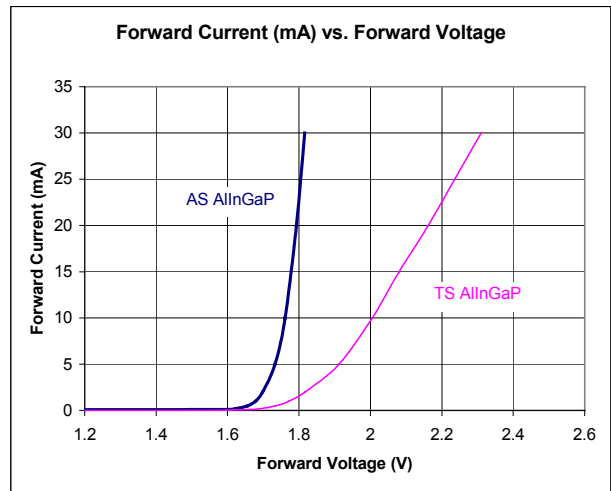
Solder resist.



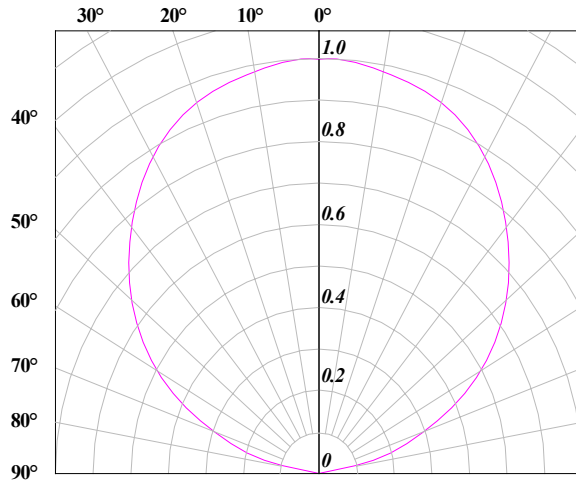
Relative luminous intensity vs. forward current.



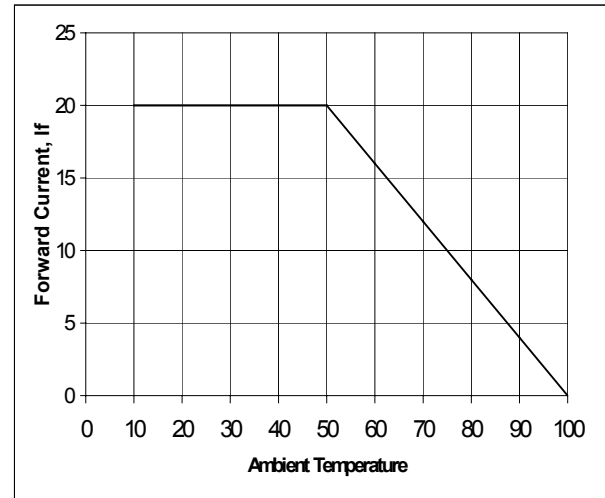
Forward current vs. forward voltage.



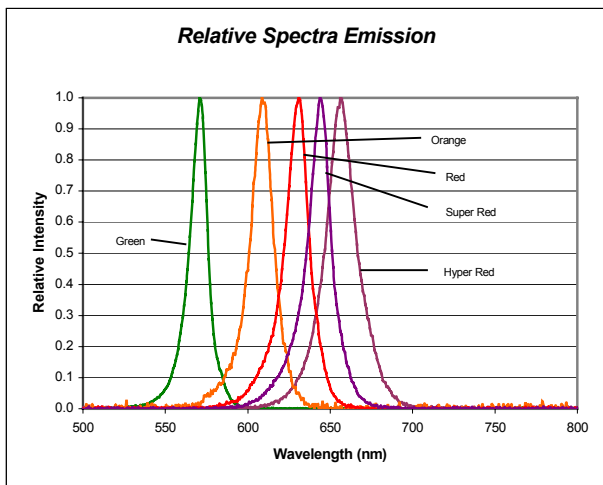
Radiation pattern.



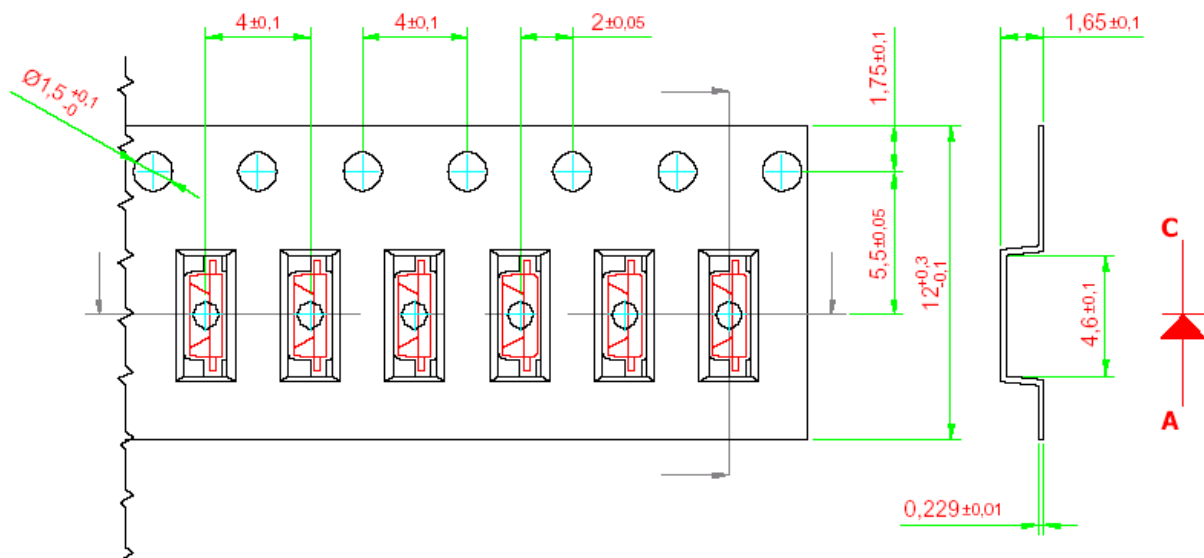
Maximum current vs. ambient temperature



Relative Intensity vs. Wavelength

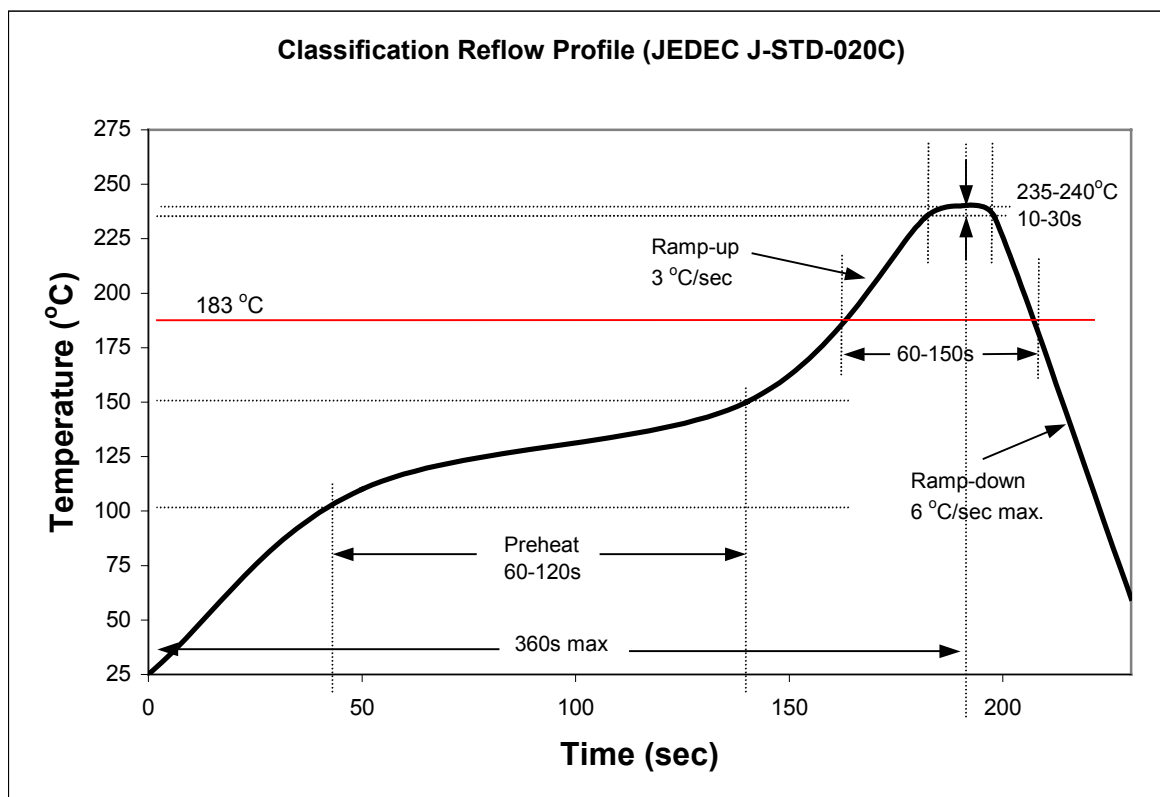


Reel diameter is 180 mm.





Recommended Sn-Pb IR-Reflow Soldering Profile.



Recommended Pb Free IR-Reflow Soldering Profile.

