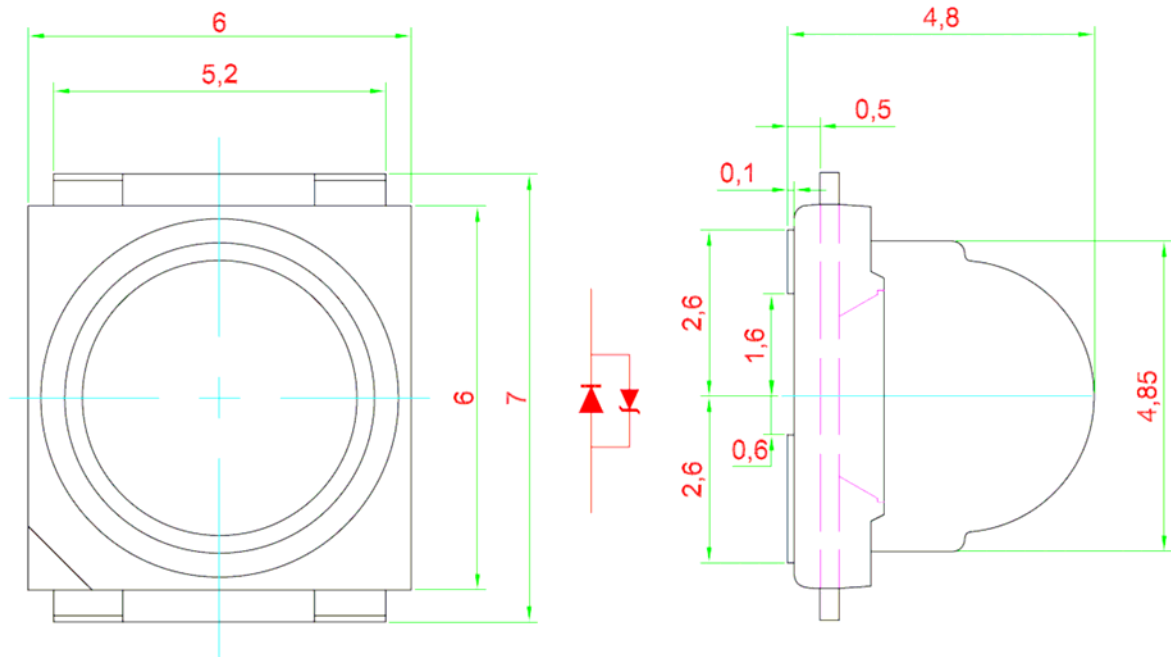




NovaLED 350 InGaN With Lens – High Lumen



General Tolerances
 ± 0.20

- Super high brightness surface mount LED.
- High flux output; 52 lumens typical.
- 60° viewing angle.
- Compact package outline (LxW) of 6.0 x 6.0 mm.
- Designed for high current drive; Maximum 350 mA.
- Build-in protection diode for ESD protection.
- Low thermal resistance; $R_{th(j-s)} = 18 \text{ K/W}$.
- Compatible to both IR reflow soldering.
- **Nova LEDs are Class 1M LED products. Do not view directly with optical instrument.**

**Material**

	Material
Lead-frame.	Cu Alloy With Ag Plating.
Package.	High Temperature Resistant Plastic, PPA.
Encapsulant	Silicone Resin.
Soldering Leads.	Sn-Sn Plating.

Note: This product is Pb free.

Absolute Maximum Ratings

	Maximum Value	Unit
DC forward current.	350	mA
Peak pulse current	1000	mA
Reverse voltage.	Not designed for reverse bias	V
LED junction temperature.	125	°C
Operating temperature.	-40 ... +100	°C
Storage temperature.	-40 ... +100	°C
ESD Threshold (HBM)	2000	V

Optical Characteristics at Ta=25°C.

Part Number	Color	Flux @ If=350mA	Intensity @ If=350mA (mcd)			Viewing Angle
		Typ. (lm)	Min	Typ.	Max	
BL-PPW-TS6-AHJ-1	White	52	35,500	42,000	56,000	60

IV Bin	Intensity @ If = 350mA (mcd)	
	Min	Max
AH	35,500	45,000
AJ	45,000	56,000

1. Luminous intensity is measured with an accuracy of $\pm 11\%$.
2. Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.

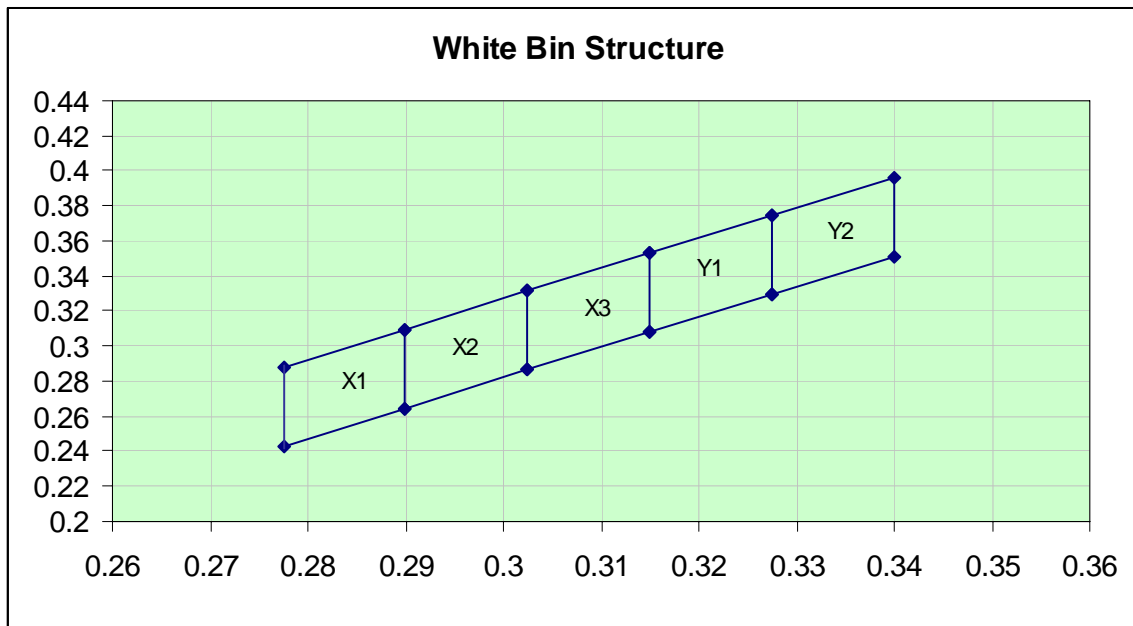


Electrical Characteristics at Ta=25°C.

		Vf @ If=350mA	
Part Number	Color	Typ. (V)	Max. (V)
BL-PPW-TS6	White	3.6	4.0

Forward voltage, Vf is measured with a current pulse of 1 ms and an accuracy of ±0.1 V.

Color Bin



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

		1	2	3	4
X1	Cx	0.2775	0.29	0.29	0.2775
	Cy	0.243	0.265	0.310	0.288
X2	Cx	0.29	0.3025	0.3025	0.29
	Cy	0.265	0.286	0.331	0.310
X3	Cx	0.3025	0.315	0.315	0.3025
	Cy	0.286	0.308	0.353	0.331
Y1	Cx	0.315	0.3275	0.3275	0.315
	Cy	0.308	0.330	0.375	0.353
Y2	Cx	0.3275	0.34	0.34	0.3275
	Cy	0.330	0.351	0.396	0.375



Correlated Color Temperature (CCT)

Color Bin	Minimum CCT (K)	Maximum CCT (K)
Y2	5000	5500
Y1	5500	6000
X3	6000	7000
X2	7000	8000
X1	8000	10000

Note: CCT values provided for each of the color bins are an approximation based on correlation.

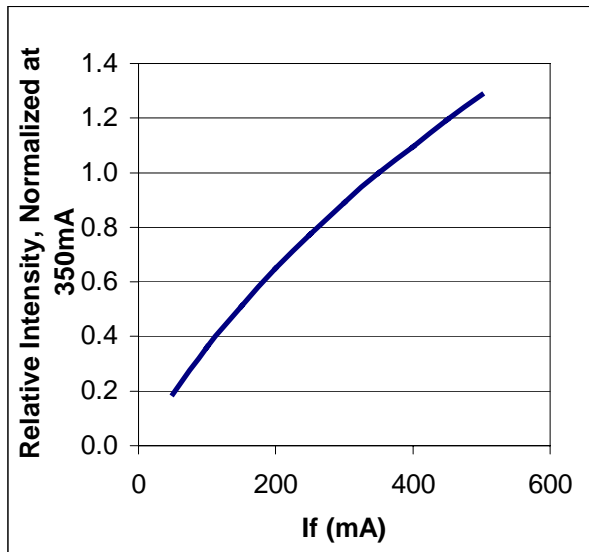
Correlation Between Luminous Intensity And Luminous Flux.

IV Bin	Luminous Intensity (mcd)		Luminous Flux (lm)	
	Min	Max	Min	Max
AH	35,500	45,000	TBD	
AJ	45,000	56,000		

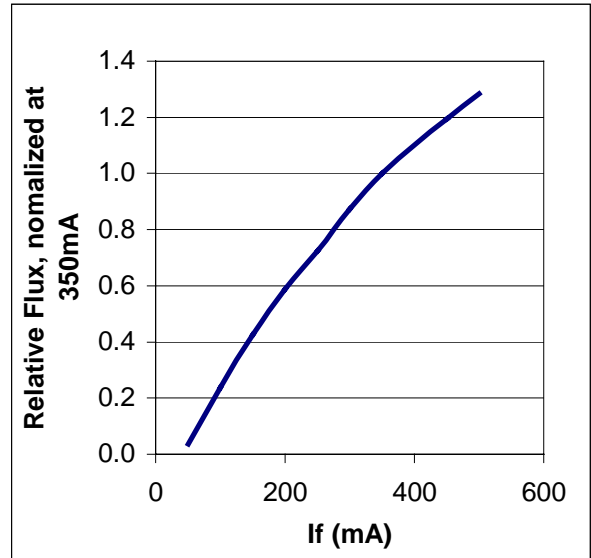
Note: Data provided above is based on approximation.



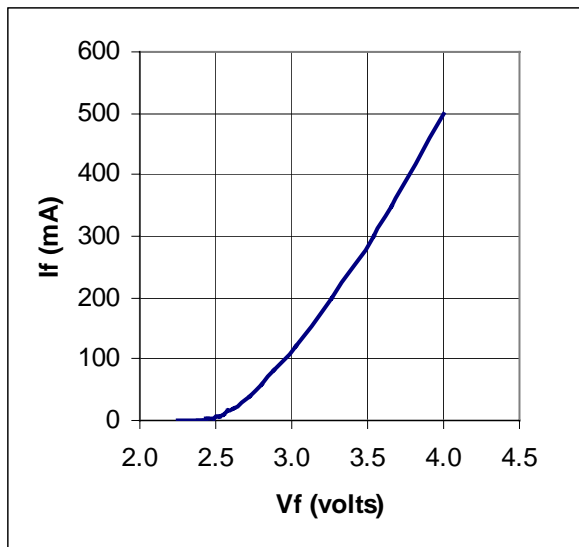
Relative luminous intensity vs. forward current.



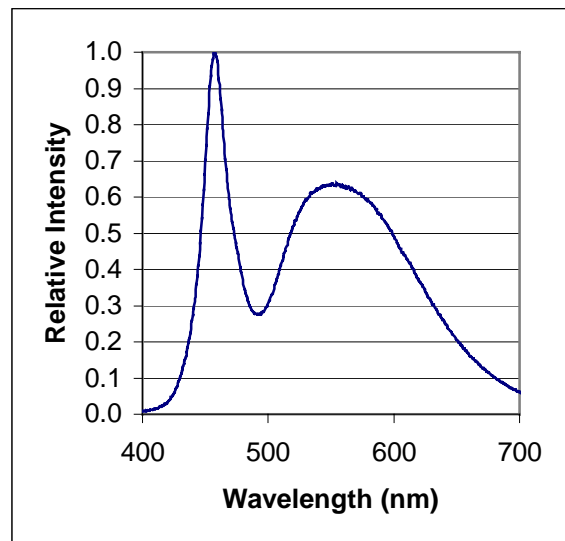
Flux vs. forward current.



Forward current vs. forward voltage.

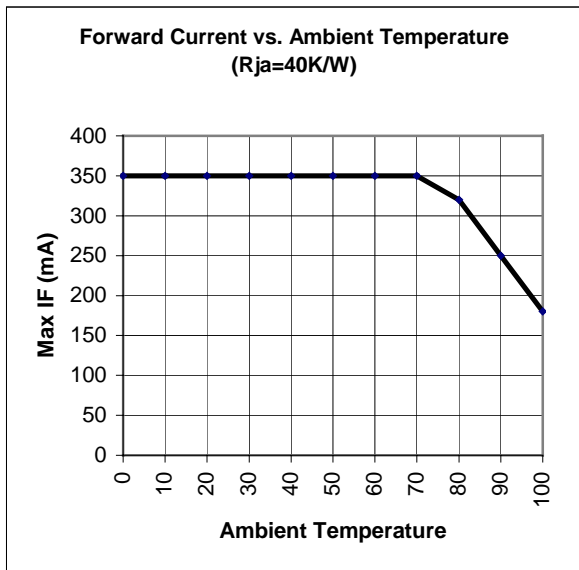


Relative Spectra Emission

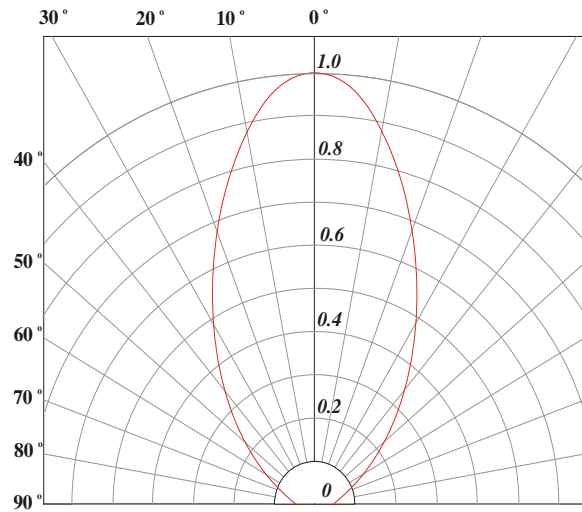




Maximum Permissible Current



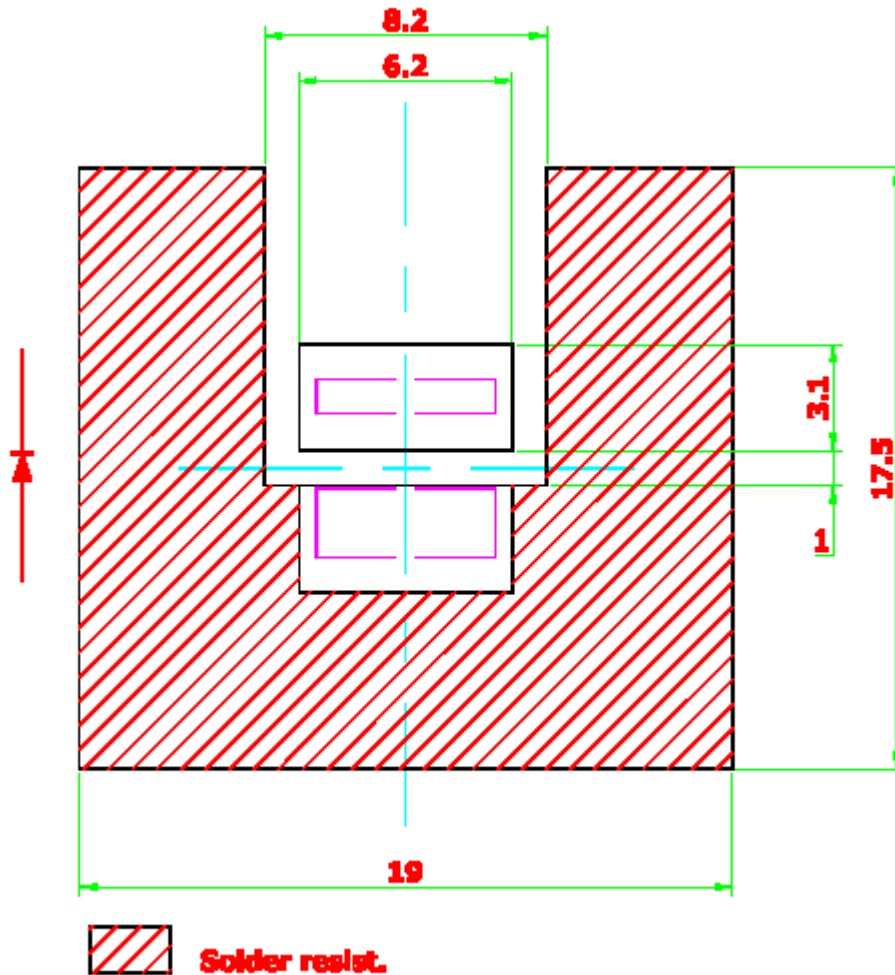
Radiation pattern.





Solder Pad Design.

Note : Metal core circuit board (MCPCB) is highly recommended for applications. Please consult sales and marketing for additional information.

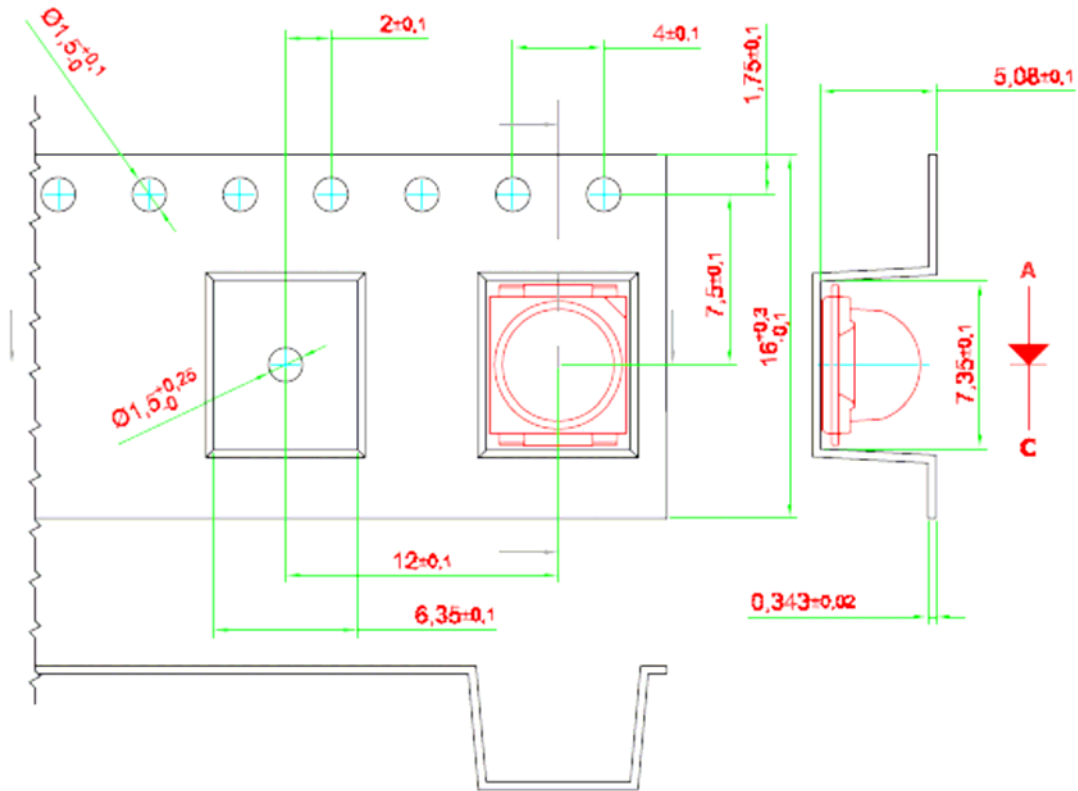




Taping And Orientation.

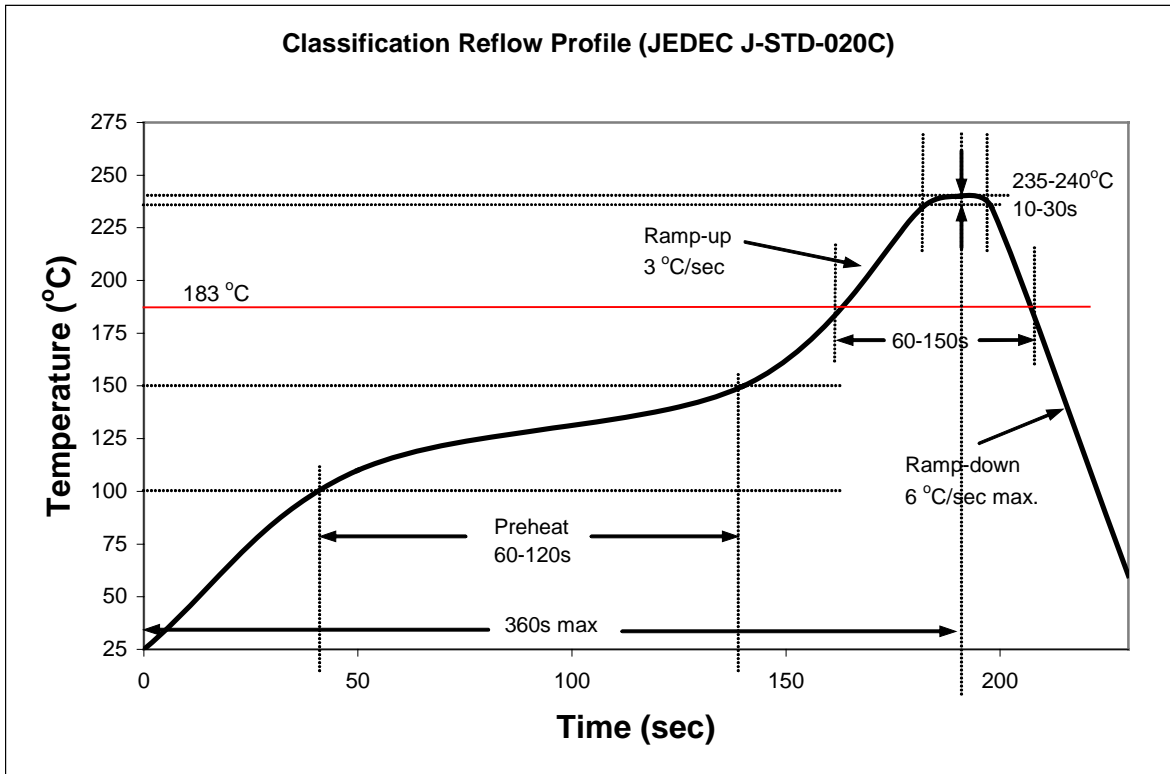
Reels come in quantity of 1000 units.

Reel diameters are 330 mm.





Recommended Sn-Pb IR-Reflow Soldering Profile.



Recommended Pb Free IR-Reflow Soldering Profile.

