

Notes:

- All dimensions are in millimeter (inch);
- Tolerance is $\pm 0.25\text{mm}(0.01")$ especially other specified;
- Ping length, housing color, marking no & circuit diagram can be customized;
- Specifications are subject to change without notice



Chip Material: InGaN with Cree's proprietary G'Sic® Blue LED Chip (Code WH1)

CREE® CHIPS**Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	PD	93	mW
Peak Forward Current (1/10 Duty Cycle, 0.1Ms Pulse Width)	IPEAK	100	mA
DC Forward Current	IF	30	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	TA	-40°C to +100°C	
Storage Temperature Range	TSTG	-40°C to +100°C	
Electrostatic Discharge Threshold*		1000V	
Electrostatic Discharge Classification		Class 2	
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

* Product resistance to electrostatic discharge (ESD) according to the HBM is measured by simulating ESD using a rapid avalanche energy test (RAET). The RAET procedures are designed to approximate the minimum ESD ratings shown. The ESD classification of Class 2 is based on sample testing according to MIL-STD-883E

Electrical Optical Character and Curves (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Location	Test Condition
Forward Voltage	VF	2.70	2.90	3.10	V	Per Segment	IF=20mA
Relative Flux	RF	10.0	11.0	12.0	mW	Per Segment	IF=20mA
CIE Coordinates	X	--	0.31	--	--	Per Segment	IF=20mA
	Y	--	0.32	--	--	Per Segment	IF=20mA
Reverse Current	IR	-	-	2	uA	Per Segment	VR=5V

Note:

Luminous intensity tolerance is $\pm 10\%$;Dominant Emission Wavelength tolerance is $\pm 5\%$

Typical Electro- Optical Characteristic Curve:

FIG. 1 Forward Current Vs. Forward Voltage

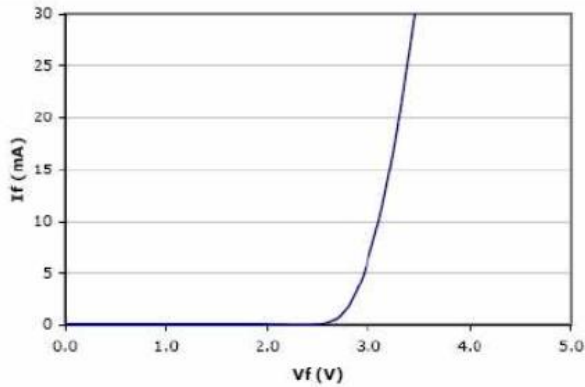


FIG. 2 Relative Intensity Vs. Forward Current

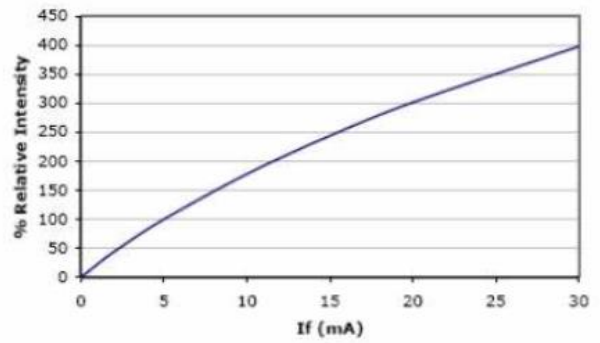


FIG. 3 Wavelength Shift Vs. Forward Current

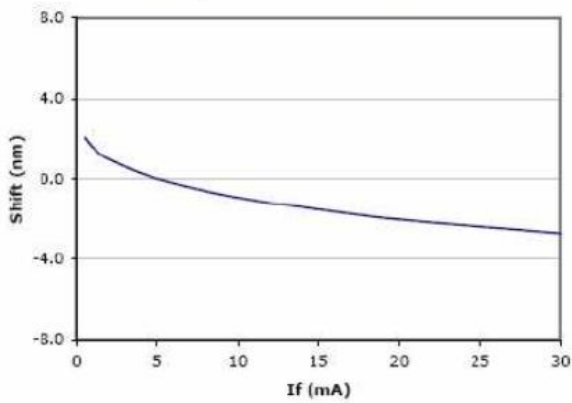


FIG. 4 Relative Intensity Vs. Wavelength

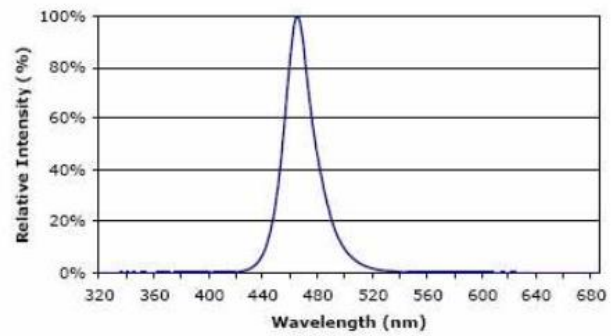


FIG. 5 This is a representative radiation pattern for the Ultra Thin Chip LED Product. Actual patterns will vary slightly for each chip.

