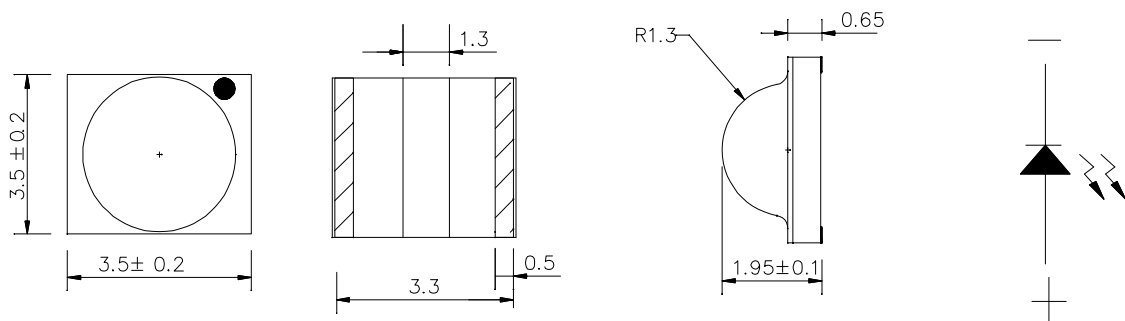


**Features**

- High power LED light source
- Instant light(less than 100 ns)
- Low voltage DC operated
- Low thermal resistance
- RoHS Compliant
- Lead free reflow solder compatible

**Applications**

- Reading lights (car,bue ,aircraft)
- Portable (flashlight,bicycle)
- Downlighters/Orientation
- Decorataive/Entertainmet
- Bollards/Security/garden

**Package Dimensions****Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$ mm(.0079") unless otherwise noted.
3. Specifications are subject to change without notice
4. This drawing is only for indication, not as a basis for the actual structure.

**Selection Guide**

Part No	Dice	Source Color
FSL-3535195W-T300NHC	InGaN	White

**Electrical / Optical Characteristics At Ta=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
$\Phi_V$	Flux	80		120	lm	IF=300mA
2 $\theta$ 1/2	Viewing Angle		120		deg	
Tc	Color Temperature	2700	6000	8000	K	IF=300mA
VF	Forward Voltage	2.8	3.2	4.0	V	IF=300mA
IR	Reverse Current			10	$\mu$ A	VR=5V

Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 optical centerline value

**Absolute Maximum Ratings At Ta=25°C**

Parameter	White	Unit
Power Dissipation	1	W
Peak Forward Current (1/10 Duty Cycle @ 0.1ms)	700	mA
Continuous Forward Current	450	mA
Reverse Voltage	5	V
Operating Temperature Range	-30°C to + 85°C	
Storage Temperature Range	-40°C to + 100°C	
Soldering Condition	260°C For 10 Seconds	

Note:

1. 1/10DutyCycle, 0.1msPulseWidth

**Electrical Optical Characteristics Curves At Ta=25°C**

Fig 1. Relative Spectrum of Emission

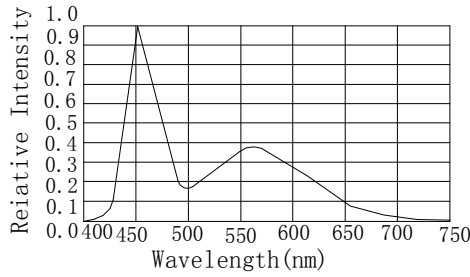


Fig 2. Forward Current

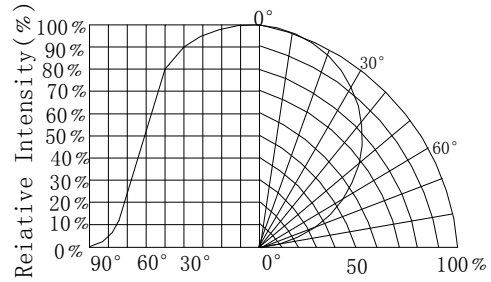


Fig 3. Radiation Characteristics

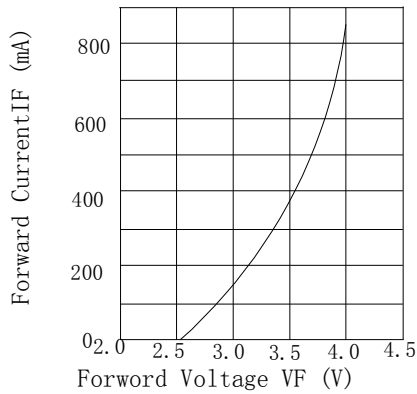


Fig 4. Forward Current Derating Curve

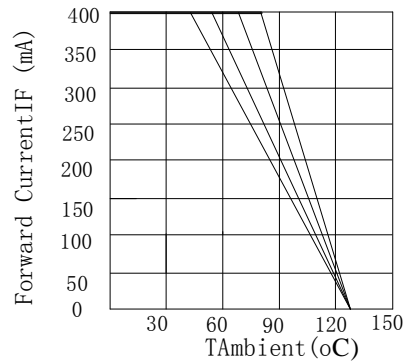


Fig 5. Relative Luminous Flux

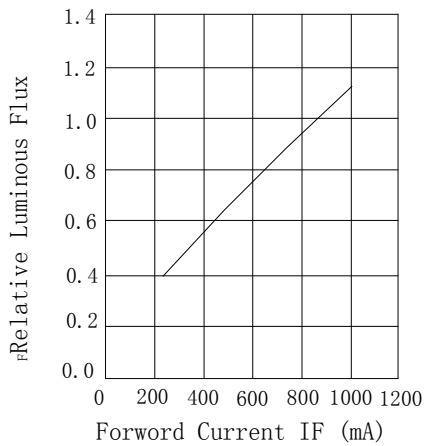
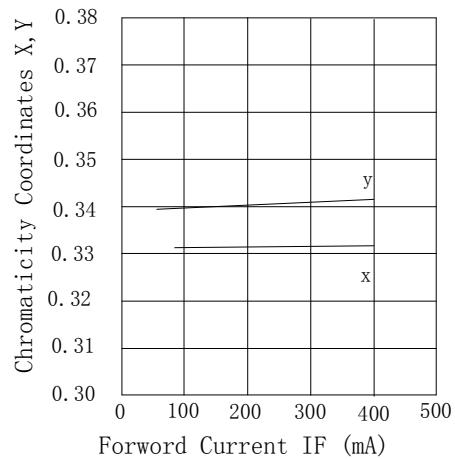
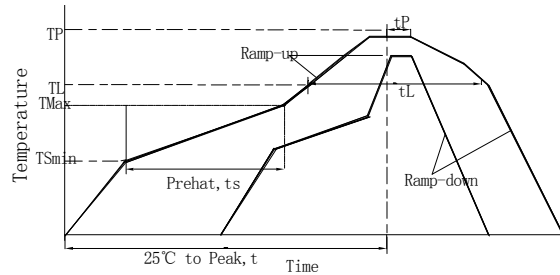


Fig 6. Chromaticity Coordinate Shift

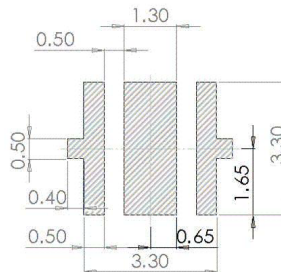


**SMT Reflow Soldering Instructions**

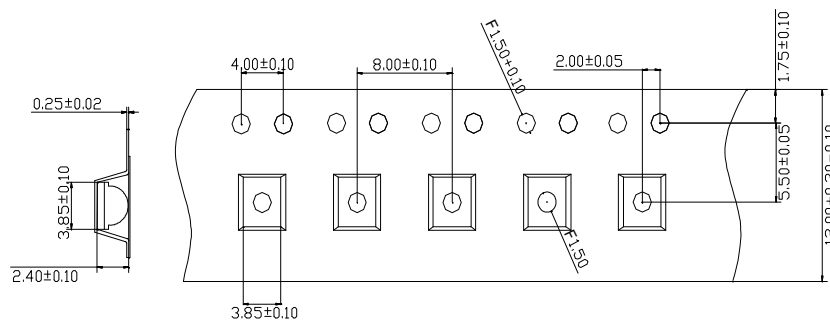


- Notes:
- 1.The LEDs can soldered using the reflow soldering or hand soldering method. The recommended hand soldering condition is 350°C max.and 2secs max .for one time only.
  - 2.All temperature refer to topside of the package.
  - 3.condition referring to J-STD-202B.If the LEDs were unpacked more than 24hrs,baking the LEDS at 60°C for 60 min. before soldering process.
  - 4.The soldering process could be further referred to different soldering grease material characteristic. The grease vendor will provide this information.
  - 5.A rapid process is not recommended for the LEDs cooling down from the peak temperature
  - 6.Although the recommended reflow conditions are specified above the reflow or hand soldering condition at the lowest possible temperature is desirable for the LEDs

**Recommended Soldering Pad Dimensions**



**Package Specifications (Units: mm (inches))**



- Notes:
- 1..Measured from centerline of sprocket hole to centerline of pocket.
  - 2.Cumulative tolerance of 10 sprocket hole is +/-0.20
  - 3.Other material available.