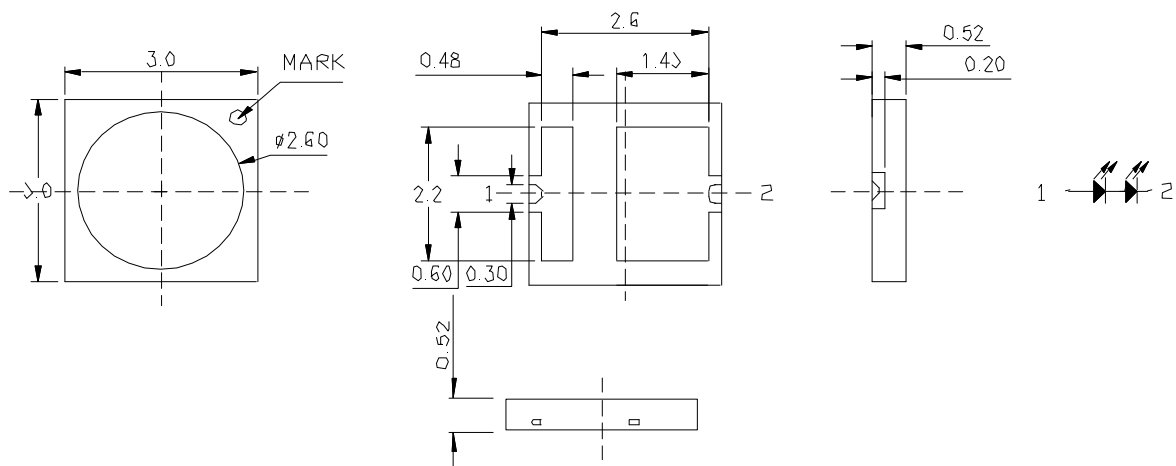


Features

- 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
- Decorative/Entertainment
- Bollards/Security/garden

Package Dimensions**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2\text{mm}(.0079")$ 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.

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**Selection Guide**

Part No	Dice	Source Color
FSL-3030052DW-RC2T200L160LM	InGaN	White

Electrical / Optical Characteristics At Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Φ_v	Flux	90		140	lm	IF=150mA
2 θ 1/2	Viewing Angle		120		deg	
Tc	Color Temperature	2700	6000	7000	K	IF=150mA
VF	Forward Voltage	6.0	6.2	6.8	V	IF=150mA
IR	Reverse Current			10	μ A	VR=5V

Note:

1. θ 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	1.3	W
Peak Forward Current (1/10 Duty Cycle @ 0.1ms)	700	mA
Continuous Forward Current	250	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

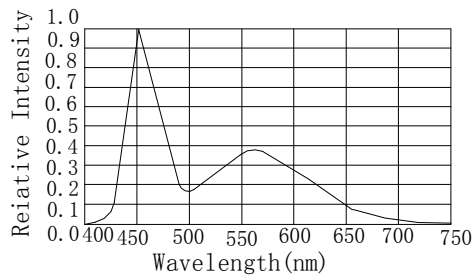


Fig 2. Forward Current

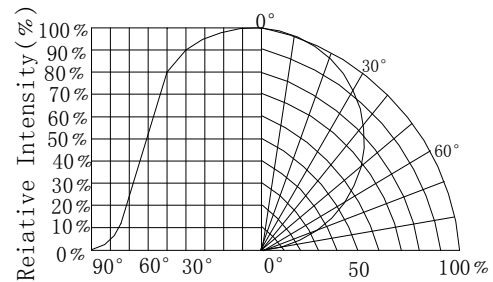


Fig 3. Radiation Characteristics

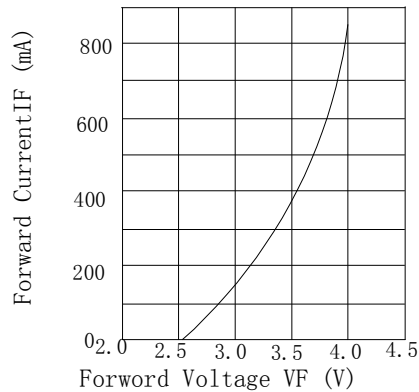


Fig 4. Forward Current Derating Curve

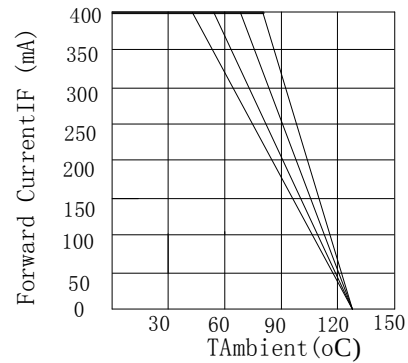


Fig 5. Relative Luminous Flux

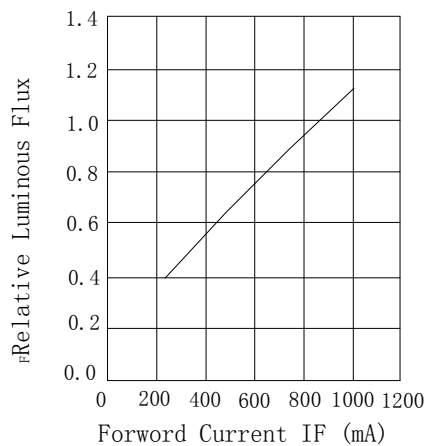
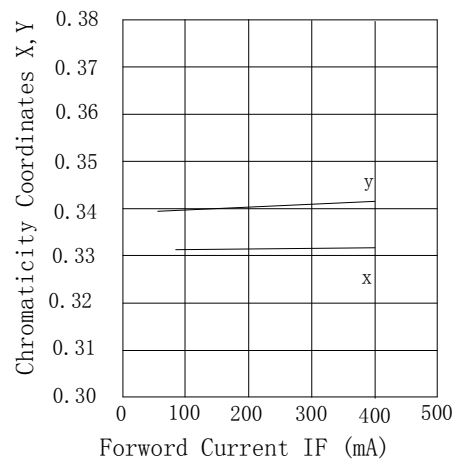
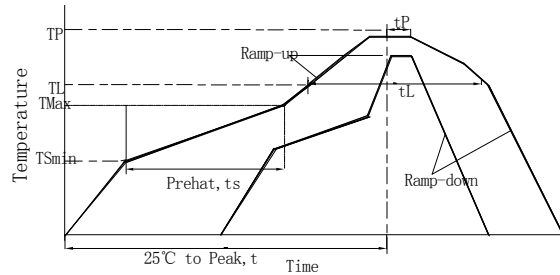


Fig 6. Chromaticity Coordinate Shift

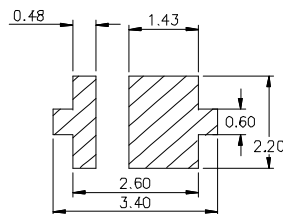


SMT Reflow Soldering Instructions

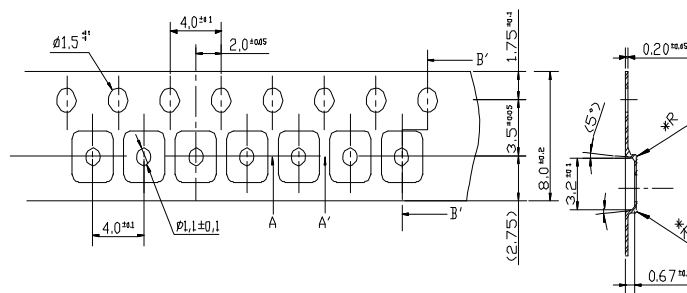


- Notes:
- 1.The LEDs can soldered using the reflow soldering or hand soldering method. The recommended hand soldering condition is 350°C max.and 2secs max .for one time only.
 - 2.All temperature refer to topside of the package.
 - 3.condition referring to J-STD-202B,If the LEDs were unpacked more than 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.