

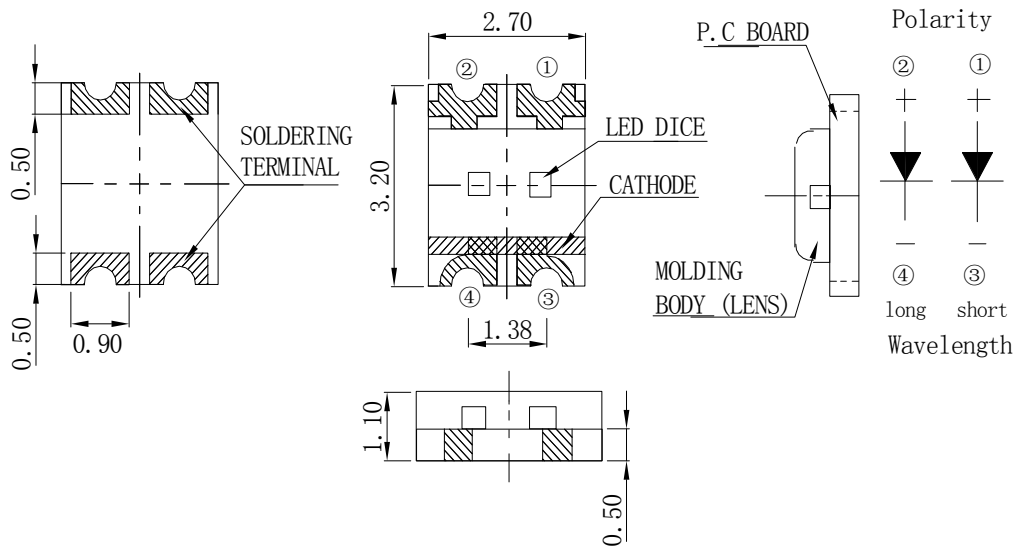
Features

- 3.2mm*2.7mm SMT LED, Super thin (1.10H mm)
- Low Power Consumption
- Wide Viewing Angle
- Various Colors
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase reflow and wave solder process.
- Meet ROHS Green Product.
- Package: 3000pcs/Reel

Applications

- Backlight and Indicator

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



Selection Guide

Part No	Lens Type	Dice	Emitted Color
FSL-3227110GR-ZC3	Water Clear	AlInGaP AlInGaP	Green Super Red

Electrical / Optical Characteristics At Ta=25°C

Symbol	Parameter		Green	Super Red	Unit	Test Condition
Iv	Luminous Intensity	MIN.	20.0	15.0	mcd	IF=20mA
		TYP.	35.0	25.0		
2θ1/2	Viewing Angle	TYP.	130	130	deg	IF=20mA
λ Peak	Peak Emission Wavelength	TYP.	574	639	nm	IF=20mA
λ d	Dominant Wavelength	TYP.	571	631	nm	IF=20mA
Δλ	Spectral Line Half-Width	TYP.	15	20	nm	IF=20mA
VF	Forward Voltage	TYP.	2.0	2.0	V	IF=20mA
		MAX.	2.4	2.4		
IR	Reverse Current	MAX.	10	10	μ A	VR 5V

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 optical centerline value

Absolute Maximum Ratings At Ta=25°C

Parameter	Green	Super Red	Unit
Power Dissipation	75	75	mW
Peak Forward Current[1]	80	80	mA
Continuous Forward Current	30	30	mA
Dreading Linear From 30°C	0.4	0.4	mA/°C
Reverse Voltage	5	5	V
Operating Temperature Range	-55°C to + 85°C		
Storage Temperature Range	-55°C to + 85°C		
Soldering Condition	260°C For 5 Seconds		

Note:

1. 1/10DutyCycle, 0.1msPulseWidth

Electrical Optical Characteristics Curves At Ta=25°C

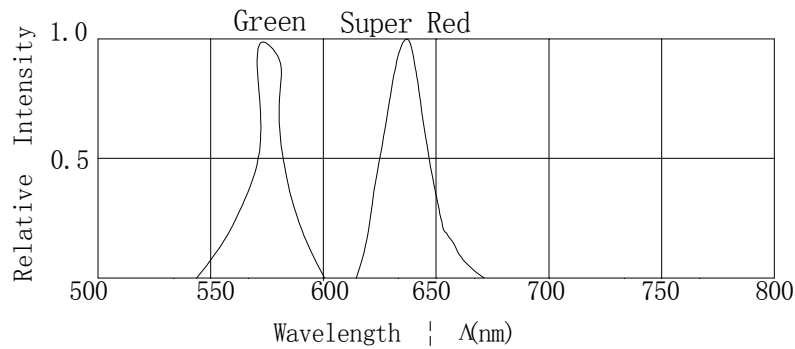


Fig.1 Relative Intensity VS. Wavelength

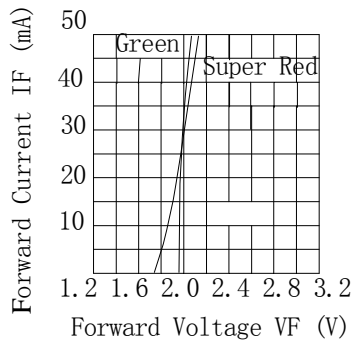


Fig.2 Forward Current vs. Forward Voltage

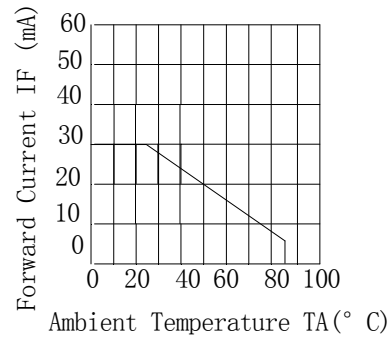


Fig.3 Forward Current Derating Curve

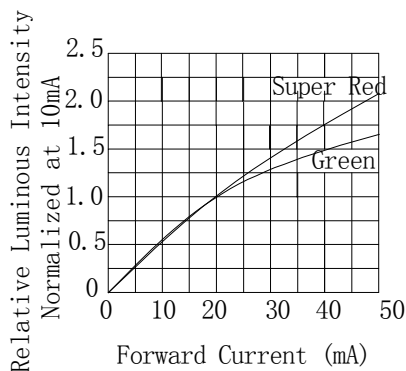


Fig.4 Relative Luminous Intensity vs. Forward Current

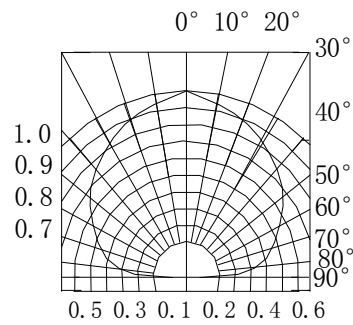
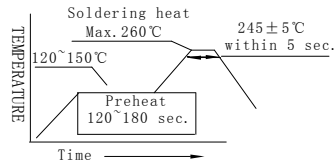


Fig.6 Spatial Distribution

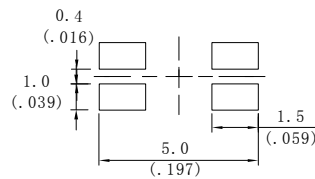
SMT Reflow Soldering Instructions



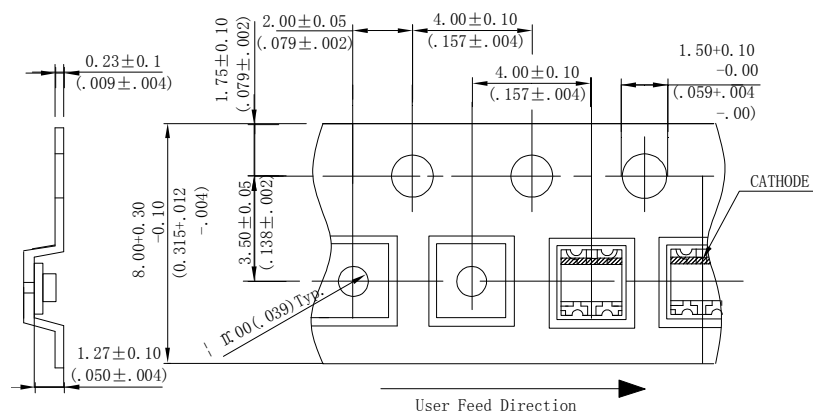
Notes:

1. Sells gives no other assurances regarding the ability of to withstand ESD. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
2. Reflow soldering should not be done more than two times.
3. Do not stress LED when soldering, and do not warp the circuit board after soldering
4. While using Iron, Power dissipation of Iron should be smaller than 25W, and temperature should be controllable. The work should be finished within 2 sec under 320°C for once only.

Recommended Soldering Pad Dimensions



Package Specifications (Units: mm (inches))



Notes:

1. The LEDs should be used within a year.
2. The LEDs should be kept in 5~30°C and 60% RH for less.
3. The LEDs should be used within 24 hours, or else should be kept in 5~30°C and 30% RH or less. And LEDs should be used within 7 days after opening the package.