

# SL-T4232IRC050-L380-C

## DATA SHEET

SPEC. NO. : SZ23040801  
DATE : 2023/04/08  
REV. : A/0

Approved By:

Checked By:

Prepared By:



### Absolute Maximum Ratings at Ta=25

Parameter	MAX.	Unit
Power Dissipation	150	mW
Continuous Forward Current	50	mA
Peak Forward Current <sup>*2</sup>	500	mA
Reverse Voltage	5	V
Electrostatic Discharge (HBM) <sup>*3</sup>	2000	V
Moisture Sensitivity Level <sup>*1</sup>	5a	
Operating Temperature	-40 to + 85	
Storage Temperature	-40 to + 100	
IR Reflow Temperature	260 for 10 Seconds MAX.	

#### 1. Storage and operation instructions:

- (1). Storage requirements before vacuum bag opened: Temperature<30 , Humidity<65%RH;
- (2). Check air leakage and vacuum bag damage before opened. If there is any issue found, check the humidity indicator card immediately after bag opened:
  - a. If color changes on “10% circle” of the humidity indicator card only and not the circles of 20% and above, components can be used without additional handling;
  - b. If color changes on both 10% and 20% circles but not the circles of 30% and above, components must be dehumidified according to the conditions of bullet (5);
  - c. If color changes on 10%, 20%, and 30% circle or above, the product should be returned to the supplier for high temperature dehumidification;
- (3). After bag opened, manual soldering or reflow process must follow the following requirements:
  - a. Complete soldering / reflow within 24 hours;
  - b. Requirements of working environment: Temperature<30 , Humidity<60%RH;
- (4). If the working condition is outside (3)a or (3)b requirement, the components must be dehumidified according to the conditions of bullet (5);
- (5). Low temperature dehumidification: temperature 60±5 , at least 24 hours;
- (6). Shelf life: 60 days. If it's over 60 days from the production date on the package label, the components must be dehumidified according to the condition of bullet (5). If customer is unable to dehumidify, return components to LIGHT for dehumidification.

#### 2. Peak Forward Current:

### Electrical Optical Characteristics at Ta=25

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	I <sub>e</sub>	45	62	---	mW/sr	I <sub>F</sub> =20mA (Note 1,3)
		110	155	---	mW/sr	I <sub>F</sub> =50mA (Note 1,3)
Viewing Angle(X)	2 <sub>1/2</sub>	---	10	---	Deg.	(Note 2)
Viewing Angle(Y)		---	10	---		
Peak Wavelength	p	---	940	---	nm	I <sub>F</sub> =50mA
Spectral Line Half- Width		---	50	---	nm	I <sub>F</sub> =50mA
Forward Voltage	V <sub>F</sub>	---	1.35	1.60	V	I <sub>F</sub> =50mA
Reverse Current	I <sub>R</sub>	---	---	10	μA	V <sub>R</sub> =5V

**Note:**

- Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
- 2<sub>1/2</sub> is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
- The I<sub>e</sub> guarantee should be added ±15% tolerance.

## Typical Electrical / Optical Characteristics Curves (25 Ambient Temperature Unless Otherwise Noted)

Fig.1 Spectral Distribution

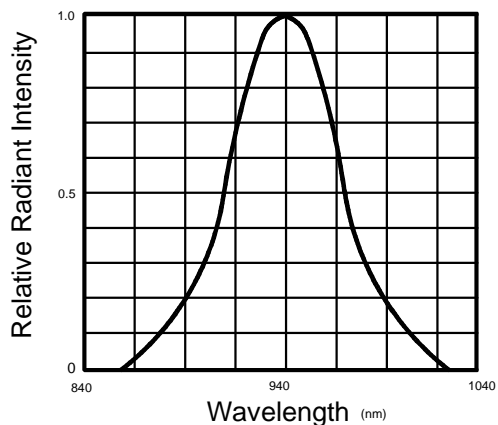


Fig.2 Forward Current Vs Ambient Temperature

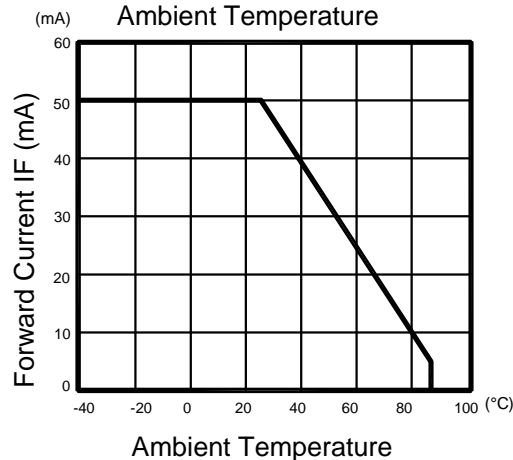


Fig.3 Forward Current Vs Forward Voltage

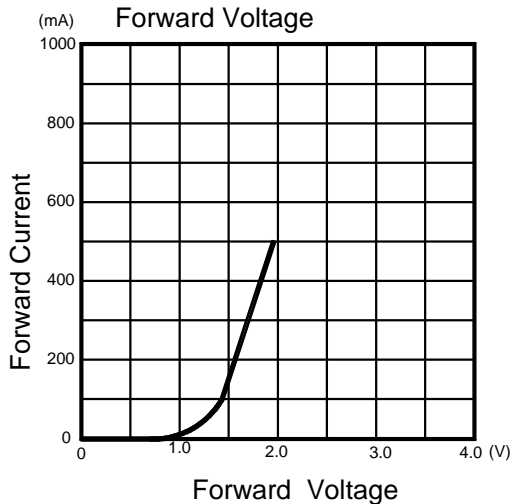


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

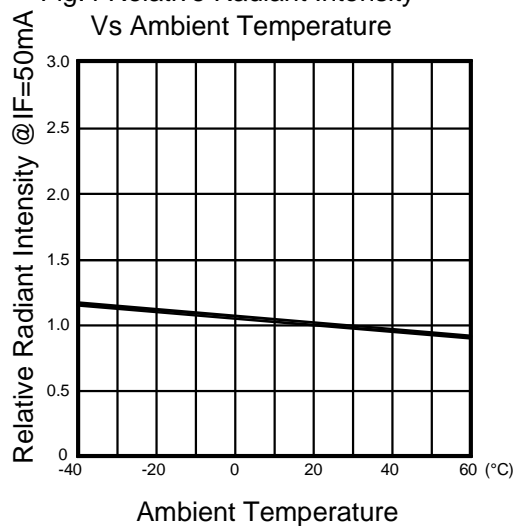


Fig.5 Relative Radiant Intensity Vs Forward Current

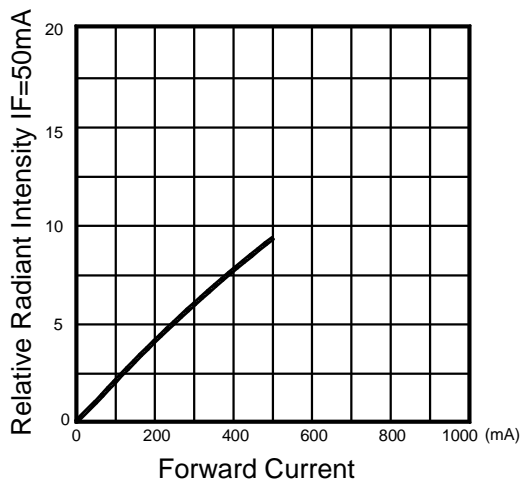
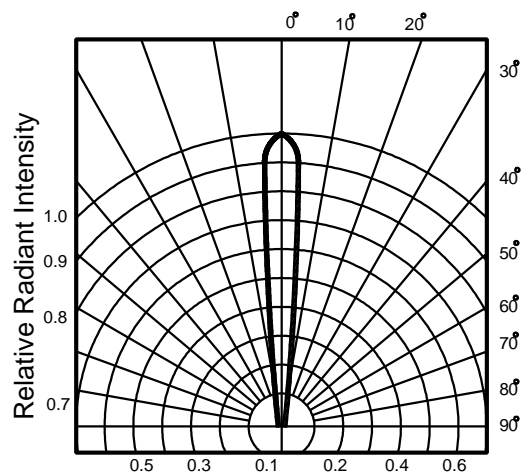



Fig.6 Radiation Diagram



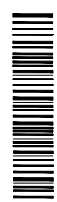
	110	130
	130	155
	155	185
	185	220
	220	260

**NOTE:** The Ie guarantee should be added  $\pm 15\%$  tolerance.

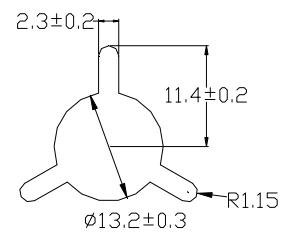
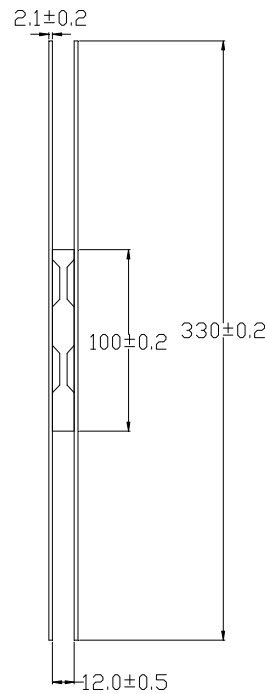
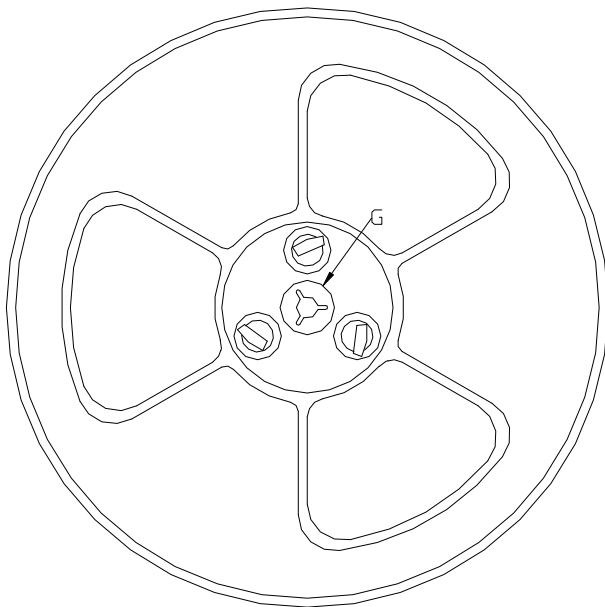
### LIGHT Universal Label

<b>LIGHT</b>		<b>RoHS</b>
Light Electronics CO., LTD.		
MODEL NAME: _____	 LOT NO.: _____	
QUANTITY: _____		
BIN: _____		
PACKING DATE: _____		
REMARKS: _____		

### Customer Defined Label

<b>LIGHT</b>		<b>RoHS</b>
Light Electronics CO., LTD.		
MODEL NAME: _____	 LOT NO.: _____	
QUANTITY: _____		
BIN: _____		
PACKING DATE: _____		
CUSTOMER P/N: _____		

MODEL NAME/	QUANTITY/
BIN./	PACKING DATE/
CUSTOMER P/N/	LOT NO./
REMARKS/	/



G 区放大图

**Note:** Tolerance unless mentioned is  $\pm 0.2\text{mm}$ ; Unit = mm





