

SL-T3020IRC050-L236-C-S

DATA SHEET

SPEC. NO. : SZ22031001
DATE : 2022/03/10
REV. : A/0

Approved By:

Checked By:

Prepared By:

Absolute Maximum Ratings at Ta=25

Parameter	MAX.	Unit
Power Dissipation	80	mW
Continuous Forward Current	50	mA
Peak Forward Current ^{*2}	500	mA
Reverse Voltage	5	V
Electrostatic Discharge (HBM) ^{*3}	4000	V
Moisture Sensitivity Level ^{*1}	4	
Operating Temperature	-40 to + 85	
Storage Temperature	-40 to + 100	
IR Reflow Temperature	260 for 10 Seconds MAX.	

1. Storage and operating:

Electrical Optical Characteristics at Ta=25

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	I _e	12.5	18	---	mW/sr	I _F =20mA (Note 1,3)
		31	45	---	mW/sr	I _F =50mA (Note 1,3)
Viewing Angle(X)	2 _{1/2}	70	75	80	Deg.	(Note 2)
Viewing Angle(Y)		12	15	18		
Decentration angle(X)	---	---	---	±4	Deg.	---
Decentration angle(Y)	---	---	---	±3	Deg.	---
Peak Wavelength	p	---	940	---	nm	I _F =50mA
Spectral Line Half- Width		---	50	---	nm	I _F =50mA
Forward Voltage	V _F	---	1.30	1.55	V	I _F =20mA
		---	1.35	1.60	V	I _F =50mA
Reverse Current	I _R	---	---	5	μA	V _R =5V

Note:

1. Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
2. $2_{1/2}$ is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
3. The I_e guarantee should be added ±15% tolerance.

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

Fig.1 Spectral Distribution

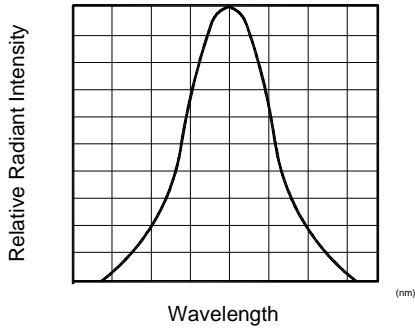


Fig.2 Forward Current Vs Ambient Temperature

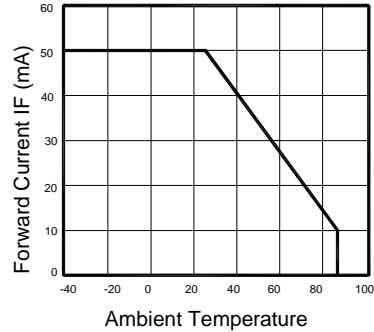


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

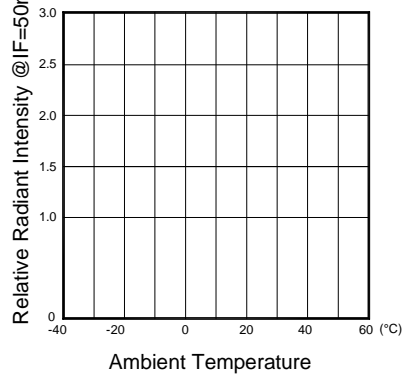
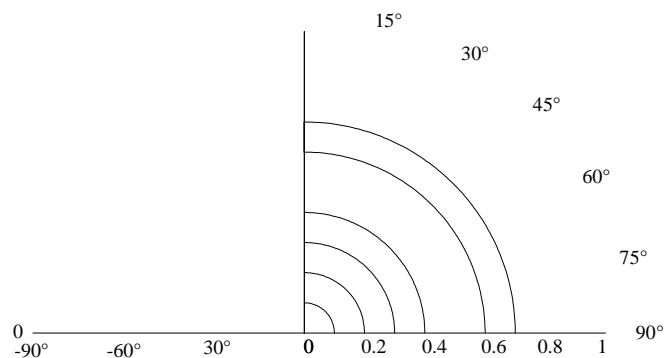
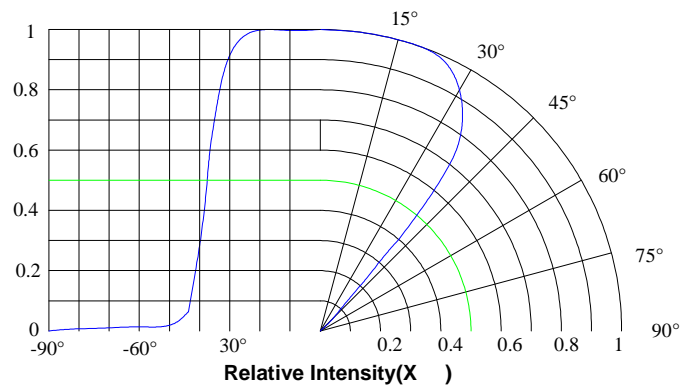




Fig.6 Radiation Diagram





LTD.

Label Explanation

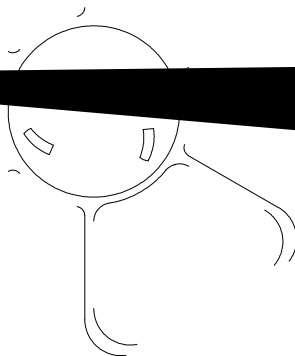
LIGHT Universal Label

LIGHT	
Light Electronics CO., LTD.	
MODEL NAME: _____	 LOT NO. : _____
QUANTITY: _____	
BIN: _____	
PACKING DATE: _____	
REMARKS: _____	

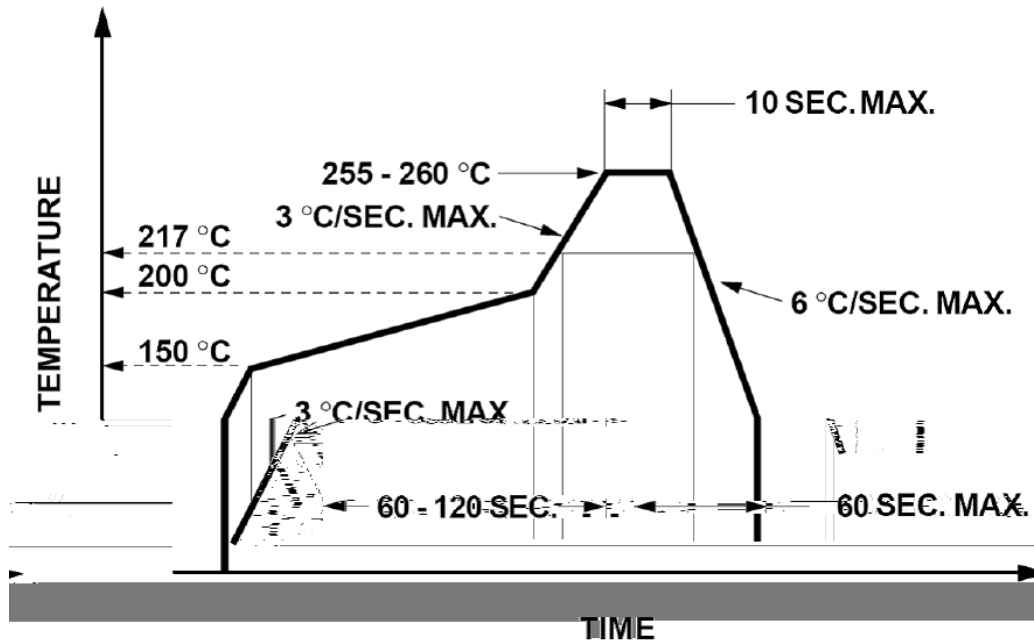
Customer Defined Label

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

Reel Dimensions



Suggest IR Reflow Condition For Lead Free



1. Reflow soldering should not be done more than two times.
2. When soldering, do not put stress on the LEDs during heating.

Soldering iron

1. When hand soldering, the temperature of the iron must less than 300 °C for 3 seconds.
2. The hand solder should be done only once.

Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.

