

# SL-T35281R1G

## DATA SHEET

SPEC. NO. : SZ16032901  
DATE : 2016/03/29  
REV. : A/0

Approved By:

Checked By:

Prepared By:



### Absolute Maximum Ratings at Ta=25

Parameter	Red	Green	Unit
Power Dissipation	72	102	mW
Peak Forward Current <sup>*2</sup>	100	100	mA
Continuous Forward Current	30	30	mA
Reverse Voltage	5	5	V
Electrostatic Discharge (HBM) <sup>*3</sup>	4000	4000	V
Moisture Sensitivity Level <sup>*1</sup>	5a		
Operating Temperature Range	-40 to + 85		
Storage Temperature Range	-40 to + 100		
Reflow Temperature	260 Max. for 10 Seconds Max.		

#### 1. Storage and operating:

- (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 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: 30 days. If it's over 30 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:

#### 3. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

### Electrical Optical Characteristics at Ta=25

Parameter	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	Red	546	715	922	mcd	I <sub>F</sub> =20mA
		Green	1300	1700	2200	mcd	I <sub>F</sub> =20mA
	1/2	---	---	120	---	Deg.	(Note 2)
Peak Emission Wavelength		Red	---	635	---	nm	I <sub>F</sub> =20mA
		Green	---	515	---	nm	I <sub>F</sub> =20mA
		Red	619	---	629	nm	I <sub>F</sub> =20mA
		Green	515	---	530	nm	I <sub>F</sub> =20mA
Spectral Line Half-Width		Red	---	15	---	nm	I <sub>F</sub> =20mA
		Green	---	30	---	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	Red	1.8	---	2.4	V	I <sub>F</sub> =20mA
		Green	2.6	---	3.4	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	---	---	---	10	μA	V <sub>R</sub> =5V

**Note:**

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tolerance of Luminous Intensity: ±15%.
- 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- single wavelength which defines the color of the device. Tolerance of Dominant Wavelength: ±1.0nm.
- Tolerance of Forward Voltage: ±0.1V.

-90°  
-75°  
-60°  
y

Part N





