



# SL-T3528IR-940-1.4 DATA SHEET

 SPEC. NO.
 : SZ17101701

 DATE
 : 2022/08/09

 REV.
 : B/1

Approved By: Checked By: Prepared By:

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### LIGHT ELECTRONICS CO., LTD.



### Absolute Maximum Ratings at Ta=25

Parameter	MAX.	Unit	
Power Dissipation	150 mW		
Continuous Forward Current	100 mA		
Peak Forward Current*2	1.0 A		
Reverse Voltage	5 V		
Electrostatic Discharge (HBM)*3	2000 V		
Moisture Sensitivity Level*1	5a		
Operating Temperature	-40 to + 85		
Storage Temperature	-40 to + 100		
IR Reflow Temperature	260 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 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: 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:

Condition for is IFP pulse: Pulse Width 100 us and duty 1%.

#### 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.

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### LIGHT ELECTRONICS CO., LTD.



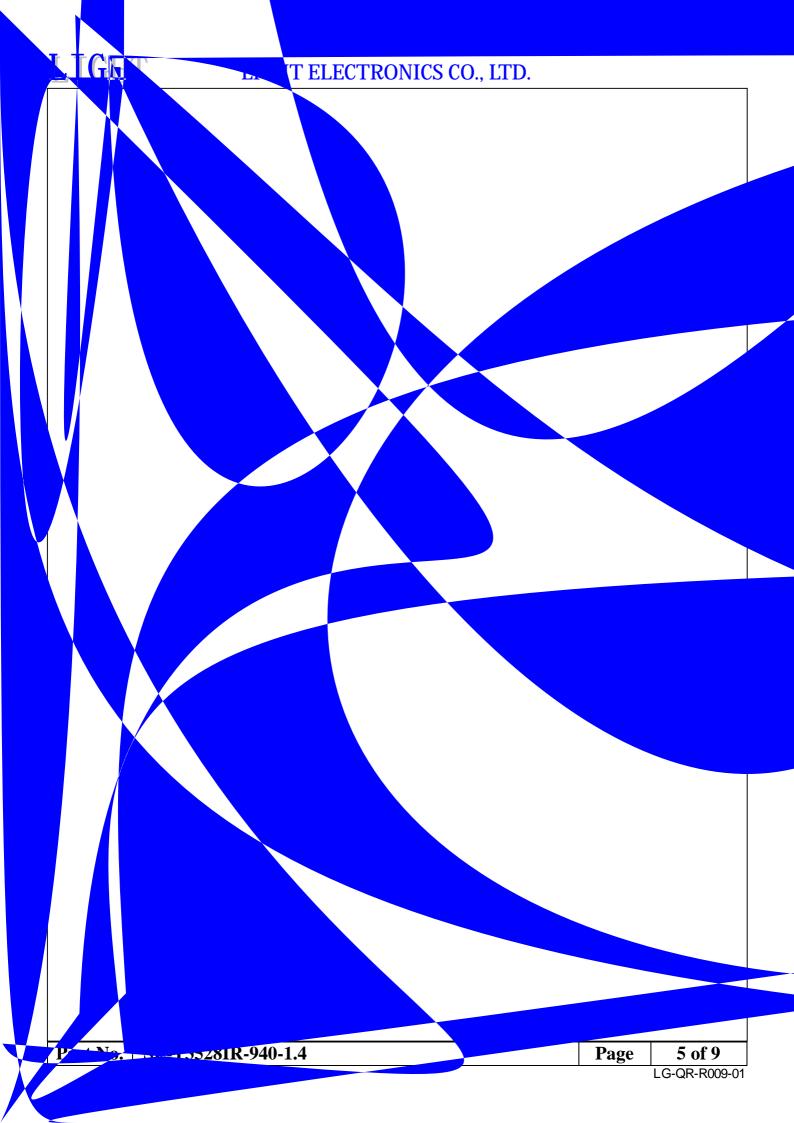
### Electrical Optical Characteristics at Ta=25

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition	
Radiant Intensity	le	1.7	2.0		mW/sr	I <sub>F</sub> =20mA (Note 1,3)	
Viewing Angle(X)	2		120		Dog	(Note 2)	
Viewing Angle(Y)	2 1/2		120		Deg.	(Note 2)	
Peak Wavelength	р		940		nm	I <sub>F</sub> =20mA	
Spectral Line Half- Width			50		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.1	1.25	1.5	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			10	μA	V <sub>R</sub> =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 1/2 is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
- 3. The le guarantee should be added  $\pm 15\%$  tolerance.
- 4. The  $V_F$  guarantee should be added  $\pm 0.1V$  tolerance.

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# LIGHT ELECTRONICS CO., LTD.



1.7	1.8
1.8	2.0
2.0	2.3
2.3	2.8

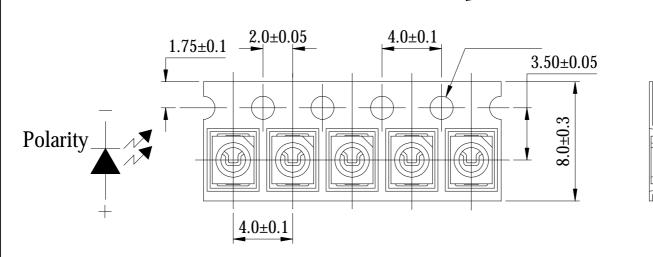
 $\mathbf{NOTE} :$  The le guarantee should be added ±15% tolerance.

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## Progressive direction



Note: Tolerance unless mentioned is ±0.1mm; Unit = mm

