

## SL-T3020IRC050-L268-C DATA SHEET

SPEC. NO. : SZ19120502  
DATE : 2020/09/28  
REV. : A/4

Approved By:

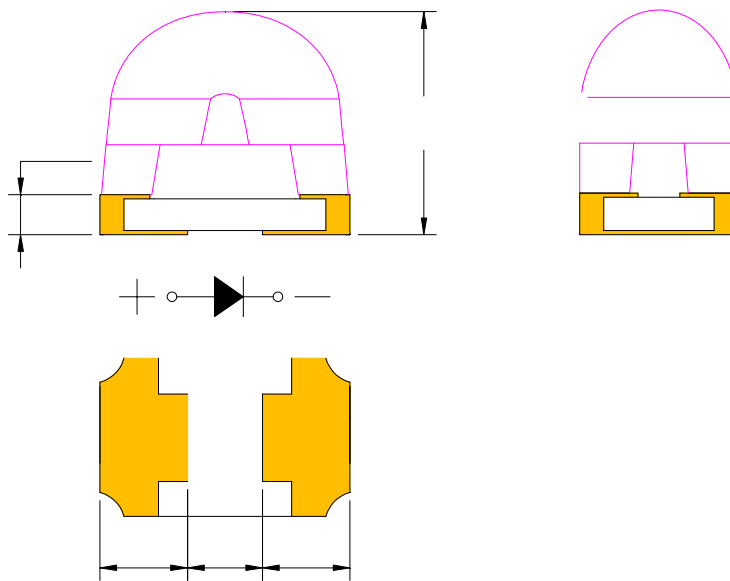
Checked By:

Prepared By:

## Features

- Pb free product—RoHS compliant
- Low power consumption, High efficiency
- Reliable and rugged
- Long life – solid state reliability
- Radiant angle: 68°

## Package Dimension



| Part NO.              | Chip Material | Lens Color  |
|-----------------------|---------------|-------------|
| SL-T3020IRC050-L268-C | AlGaAs/Si     | Water Clear |

### Notes:

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.10$ mm unless otherwise noted.
3. Specifications are subject to change without notice.

## Absolute Maximum Ratings at Ta=25°C

| Parameter                                   | MAX.                      | Unit |
|---|---------------------------|------|
| Power Dissipation                           | 80                        | mW   |
| Continuous Forward Current                  | 50                        | mA   |
| Peak Forward Current <sup>*2</sup>          | 500                       | mA   |
| Reverse Voltage                             | 5                         | V    |
| Electrostatic Discharge (HBM) <sup>*3</sup> | 4000                      | V    |
| Moisture Sensitivity Level <sup>*1</sup>    | 4                         |      |
| Operating Temperature                       | -40 to + 85               |      |
| Storage Temperature                         | -40°C to + 100            |      |
| Reflow Soldering Temperature                | 260°C 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 72 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: 180 days. If it's over 180 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.

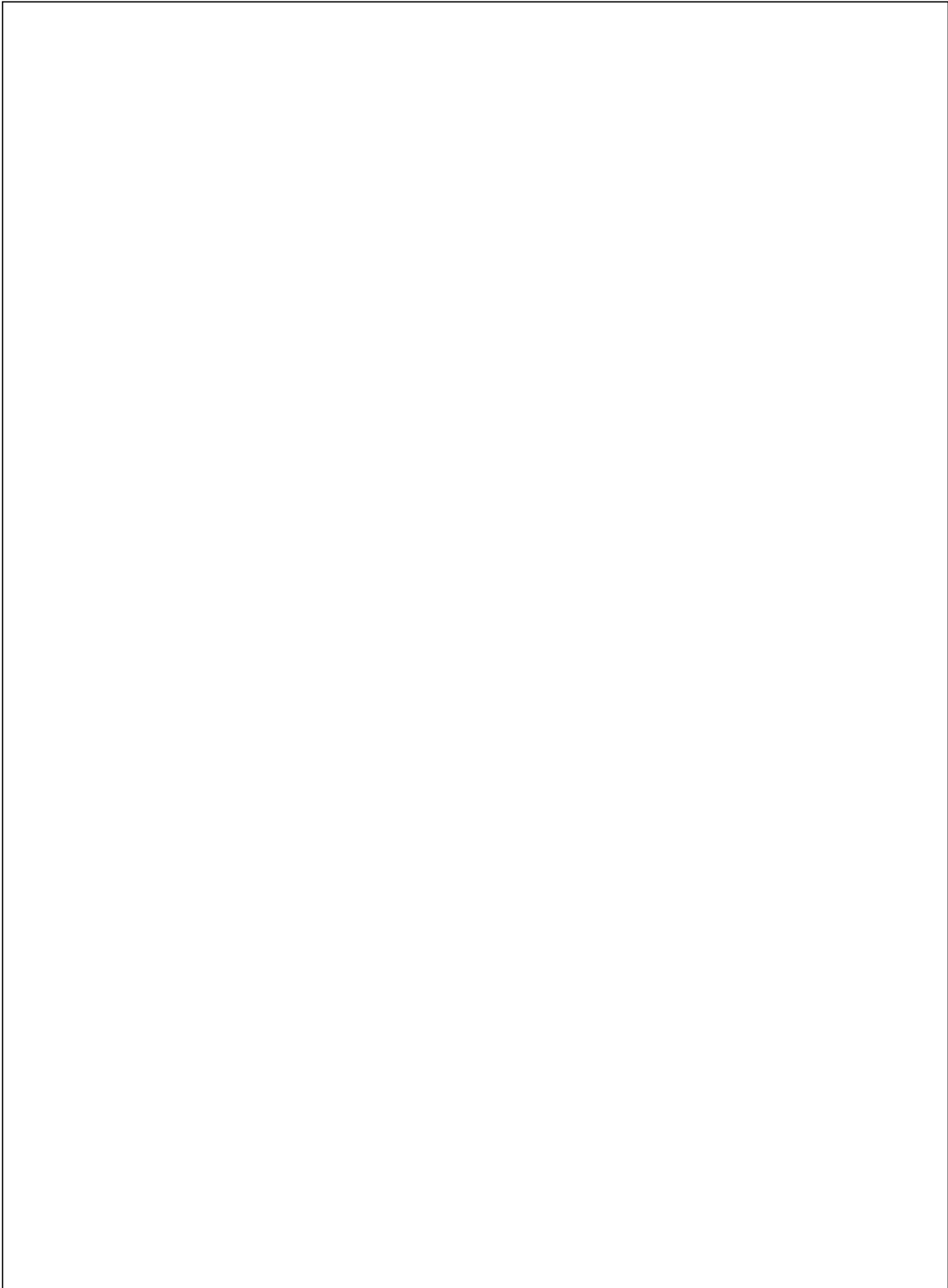
### 2. Peak Forward Current:

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

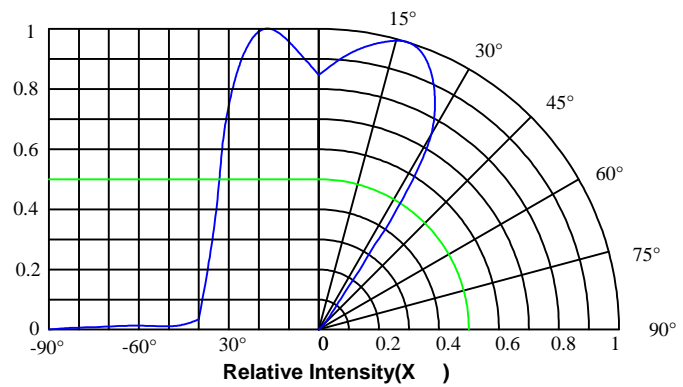
### 3. Caution in ESD:

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.

# LIGHT



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



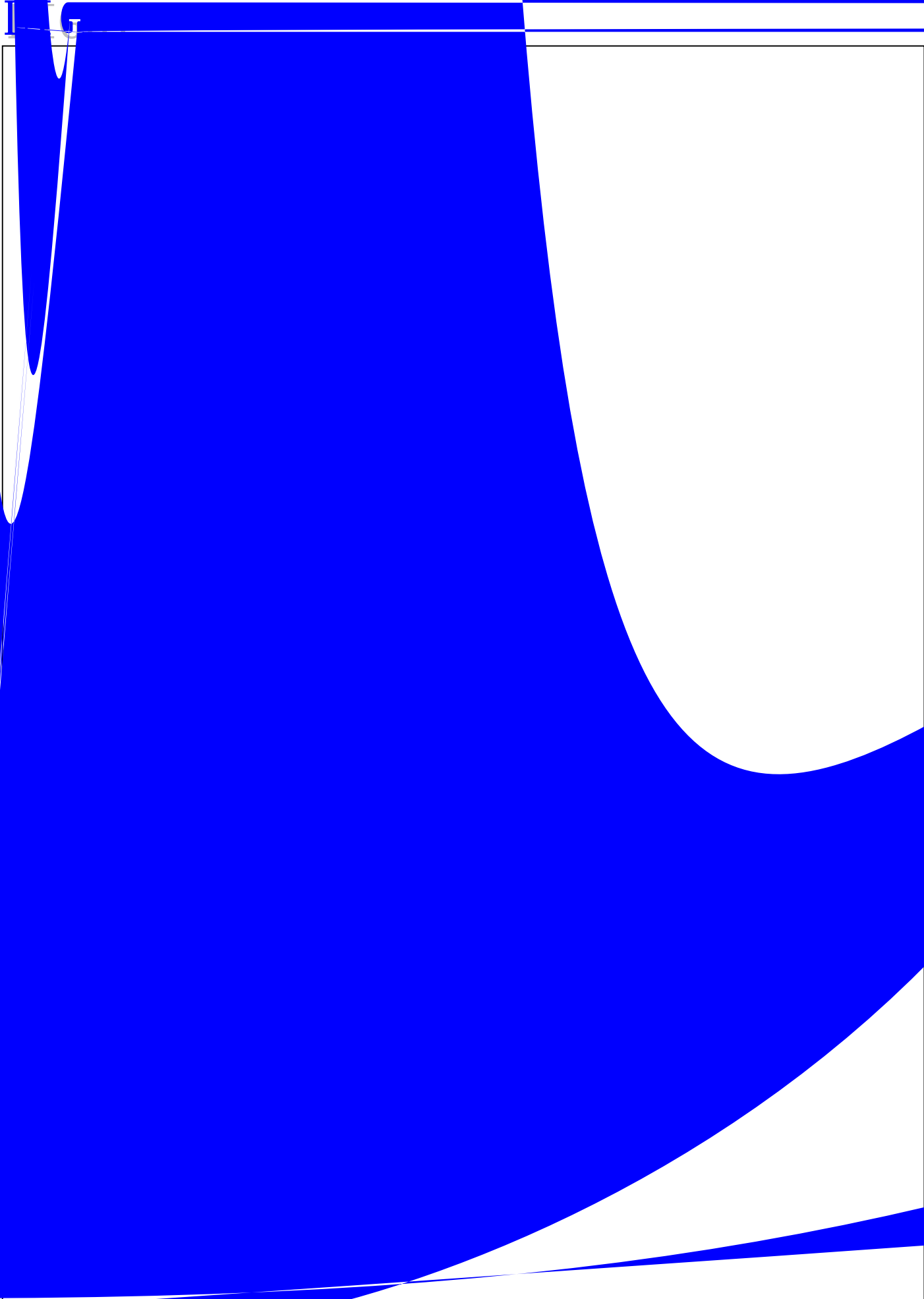
## Infrared Emitting Diode Specification

●Commodity: Infrared emitting diode

●Radiant Intensity Bin Limits (IF=50mA)

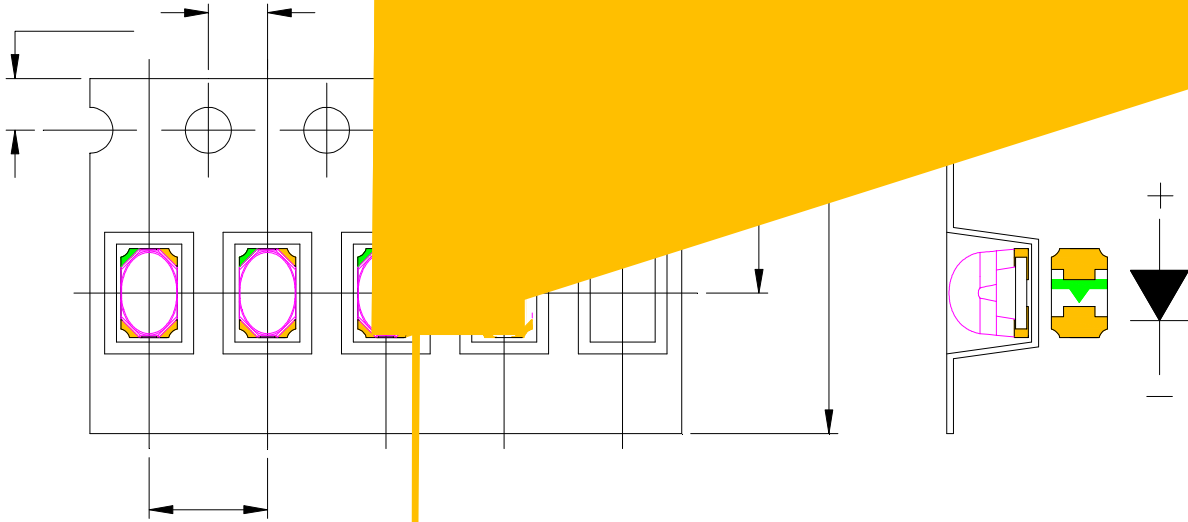
| <b>BIN CODE</b> | <b>Min.(mW/sr)</b> | <b>Max. (mW/sr)</b> |
|-----------------|--------------------|---------------------|
| 32              | 26                 | 31                  |
| 33              | 31                 | 37                  |
| 34              | 37                 | 44                  |
| 35              | 44                 | 53                  |
| 36              | 53                 | 64                  |

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



# LIGHT

## Carrier Tape Specification



**Note:** Tolerance unless mentioned is  $\pm 0.1\text{mm}$ ; Unit = mm

## Moisture Resistant Packaging

