

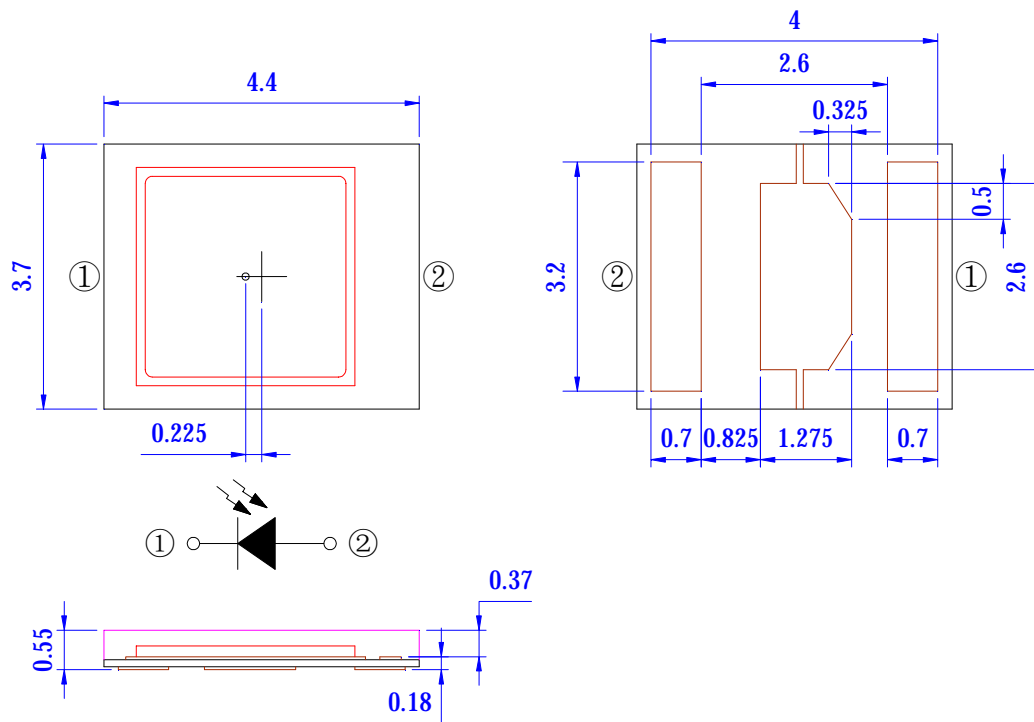
## Features

- Pb free product—RoHS compliant
- High Photo Sensitivity
- Reliable and rugged
- Long life – solid state reliability
- Sensitivity angle: 135°

## Application

- Health Monitoring
- Photo Detector

## Package Dimension



Part NO.	Chip Material	Lens Color
SL-T4437PDC020-L55	Silicon	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.



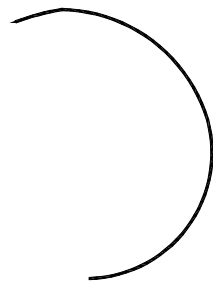
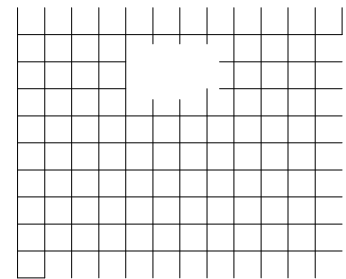
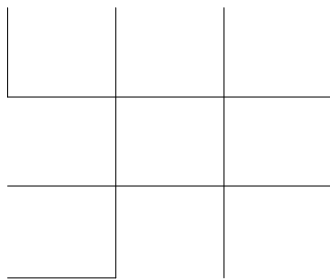
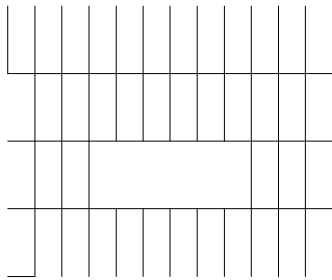
## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Reverse Light Current	$I_L$	---	40	---	$\mu A$	$V_R=5V$ $E_e=1mW/cm^2$ $p=940nm$
Reverse Light Current	$I_L$	---	35	---	$\mu A$	$V_R=5V$ $E_e=1mW/cm^2$ $p=660nm$
Reverse Light Current	$I_L$	---	25	---	$\mu A$	$V_R=5V$ $E_e=1mW/cm^2$ $d=525nm$
Reverse Dark Current	$I_D$	---	---	10	nA	$V_R=10V$ $E_e=0mW/cm^2$
Reverse Voltage	$V_{(R)}$	30	---	---	V	$I_R=100\mu A$
Forward Voltage	$V_F$	---	---	1.3	V	$I_F=10mA$
Viewing Angle(X)	$2_{1/2}$	---	135	---	Deg.	(Note 1)
Viewing Angle(Y)	$2_{1/2}$	---	135	---	Deg.	
Rise Time/Fall Time	tr/tf	---	30	---	ns	$V_R=10V$ $RL=1k$
Total Capacitance	$C_T$	---	12	---	pF	$V_R=5V$ $E_e=0mW/cm^2$ $f=1.0MHz$

### Note:

- $1/2$  is the off-axis angle at which the Reverse Light Current is half the axial Reverse Light Current.
- The  $I_L$  guarantee should be added  $\pm 15\%$  tolerance.

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

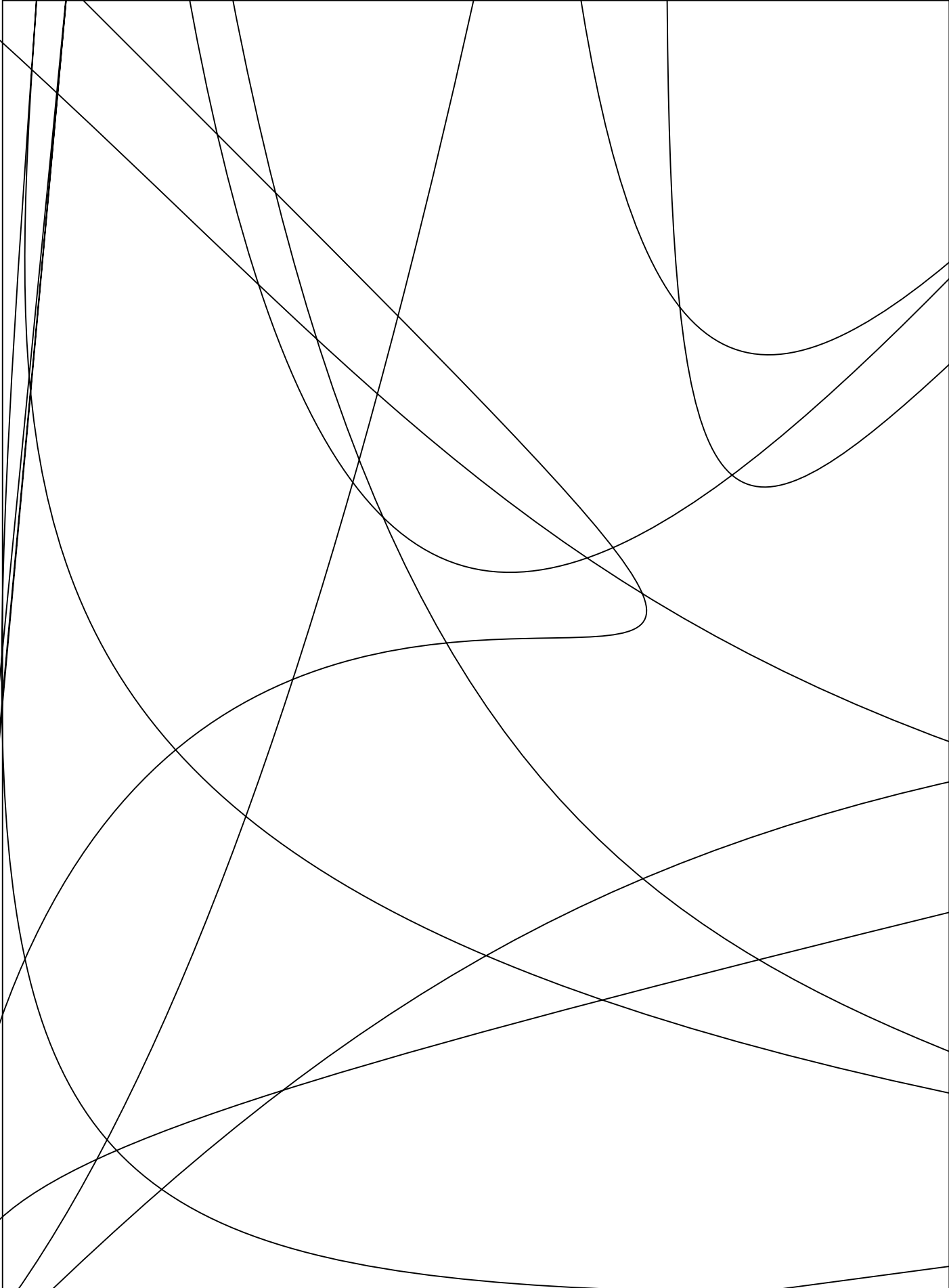


## Reverse Light Current Bin Code ( $V_R=5V$ , $E_e=1mW/cm^2$ , $p=940nm$ )

BIN CODE	Min.( $\mu A$ )	Max.( $\mu A$ )
33	31	37
34	37	44
35	44	53
...	...	...

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

**LIGHT**



# LIGHT



## Carrier Tape Specifications

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

## Moisture Resistant Packaging

Part No.	SL-T
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