

# SL-T4233PDB020-L395-E

## PHOTO Diode

### DATA SHEET

SPEC. NO. : SZ21110202  
DATE : 2021/11/02  
REV. : A/0

Approved By:

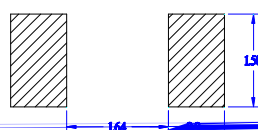
Checked By:

Prepared By:

### Features

Pb free product—RoHS compliant  
 High Photo Sensitivity  
 Reliable and rugged  
 Long life – solid state reliability  
 Sensitivity angle: 85°

### Package Dimension



Recommended Soldering patterns

| Part NO.              | Chip Material | Lens Color |
|-----------------------|---------------|------------|
| SL-T4233PDB020-L395-E | Silicon       | Black      |

#### Notes:

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



### Electrical Optical Characteristics at Ta=25

| PARAMETER             | SYMBOL          | MIN. | TYP. | MAX. | UNITS   | TEST CONDITIONS                                 |
|-----------------------|-----------------|------|------|------|---------|-------------------------------------------------|
| Reverse Light Current | $I_L$           | 21   | 26   | ---  | $\mu A$ | $V_R=5V$<br>$E_e=1mW/cm^2$<br>$\lambda_p=940nm$ |
| Reverse Dark Current  | $I_D$           | ---  | ---  | 30   | nA      | $V_R=10V$<br>$E_e=0mW/cm^2$                     |
| Reverse Voltage       | $V_{(R)}$       | 30   | ---  | ---  | V       | $I_R=100\mu A$                                  |
| Forward Voltage       | $V_F$           | ---  | ---  | 1.5  | V       | $I_F=20mA$                                      |
| Viewing Angle(X)      | $2\theta_{1/2}$ | 75   | 85   | 95   | Deg.    | (Note 1)                                        |
| Viewing Angle(Y)      | $2\theta_{1/2}$ | 25   | 35   | 45   | Deg.    |                                                 |
| Rise Time/ Fall Time  | $t_r/t_f$       | ---  | 50   | ---  | ns      | $V_R=10V$<br>$R_L=1k\Omega$                     |
| Total Capacitance     | $C_T$           | ---  | 12   | ---  | pF      | $V_R=5V$<br>$E_e=0mW/cm^2$<br>$f=1.0MHz$        |



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

| BIN CODE | Min.( $\mu A$ ) | Max.( $\mu A$ ) |
|----------|-----------------|-----------------|
| 31       | 21              | 26              |
| 32       | 26              | 31              |
| 33       | 31              | 37              |

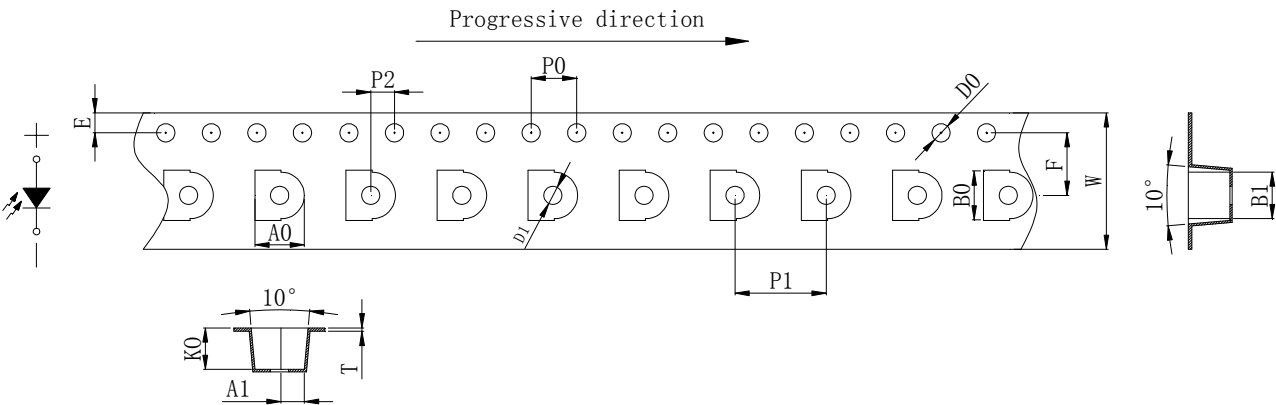
**NOTE:** The  $I_L$  guarantee should be added  $\pm 15\%$  tolerance.

Label Explanation



Carrier Tape Specifications (Loaded Quantity: 2300pcs/reel)

| ITEM | W              | A0             | A1             | B0             | B1             | K0             | E              | F              | D0             | D1             | P0             | P1             | P2             | T              |
|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| DIM  | 12.00          | 4.35           | 2.05           | 4.40           | 4.10           | 3.65           | 1.75           | 5.50           | 1.50           | 1.60           | 4.00           | 8.00           | 2.00           | 0.30           |
| TOLE | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.10<br>-0.10 | +0.05<br>-0.05 |



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

Moisture Resistant Packaging

