

# Si Photo Diode Chip--ORT2160DPD

## 1. Scope:

- The specification applies to NIP silicon photo-diode chips.
- Type: ORT2160DPD

## 2. Structure:

- NIP planar type.
- Top (Cathode) Side: aluminum(Al) alloy.
- Back (Anode) Side: silver(Ag) alloy.

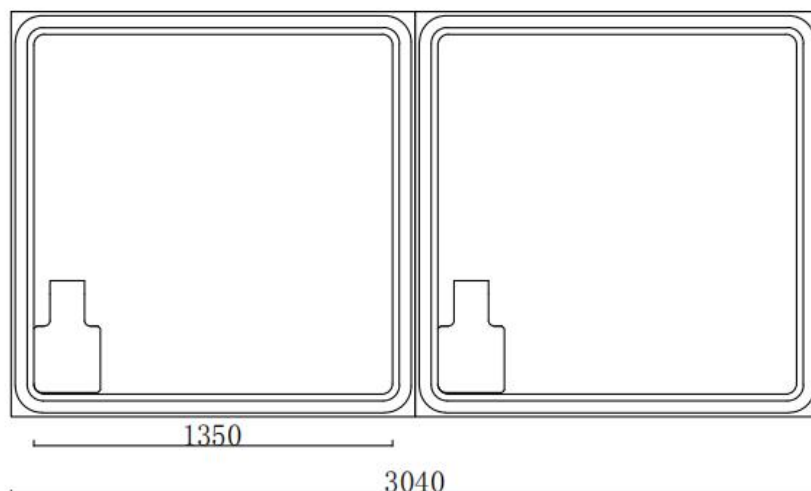
## 3. Size: (120mil×60mil)

- Chip size :  $3040\mu\text{m} \times 1520\mu\text{m} \pm 30\mu\text{m}$
- Chip thickness :  $280\mu\text{m} \pm 25\mu\text{m}$
- Active area :  $1350\mu\text{m} \times 1350\mu\text{m} \pm 15\mu\text{m}$
- Pad size :  $250\mu\text{m} \times 250\mu\text{m} \pm 10\mu\text{m}$
- Pattern drawing: per fig. 1

## 4. Electro-Optical Characteristics:

(Ta=+25℃)

| Parameter                 | Symbol      | Test Condition                                           | Min | Typ | Max | Unit          |
|---------------------------|-------------|----------------------------------------------------------|-----|-----|-----|---------------|
| Forward voltage           | $V_F$       | $I_F=10\text{mA}$ , $H=0$                                | 0.5 |     | 1.3 | V             |
| Reverse Breakdown voltage | $V_{BR}$    | $I_R=100\mu\text{A}$ , $H=0$                             | 30  |     |     | V             |
| Reverse Dark Current      | $I_D$       | $V_R=10\text{V}$ , $H=0$                                 |     |     | 10  | nA            |
| Light Current             | $I_L$       | $V_R=5\text{V}$ , Has $1\text{mw}/\text{cm}^2$ , @ 940nm |     | 80  |     | $\mu\text{A}$ |
| Peak Sensing wavelength   | $\lambda_P$ |                                                          |     | 940 |     | nm            |
| Junction Capacitance      | $C_J$       | $V_R=3\text{V}$ , $F=1\text{MHz}$                        |     | 12  |     | pF            |



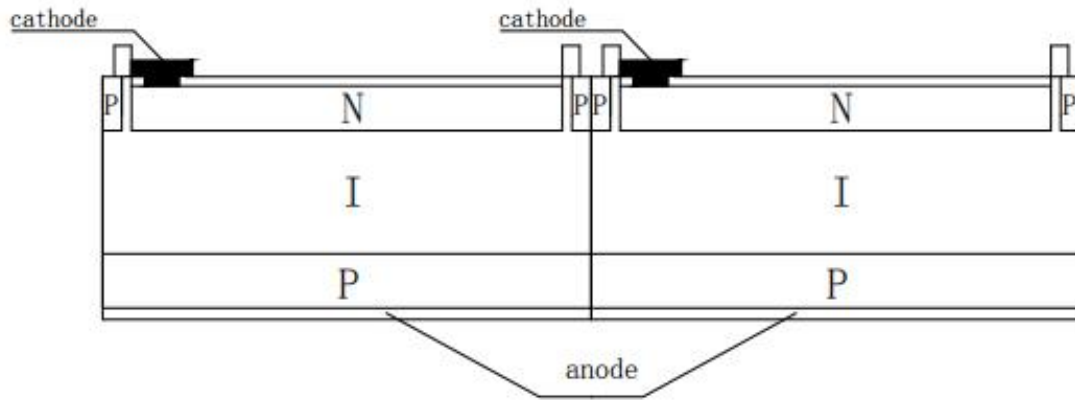


fig.1

## 5. Spectral Response

