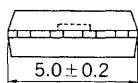
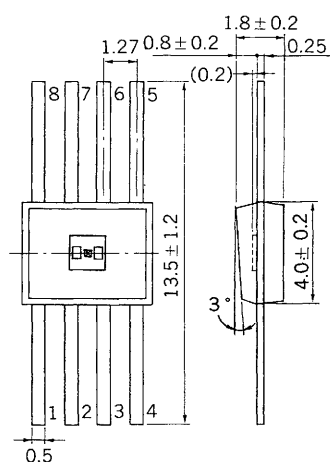


**SILICON EPITAXIAL PLANAR PIN PHOTO DIODE
DETECTOR for DAD, VD**

PACKAGE DIMENSIONS

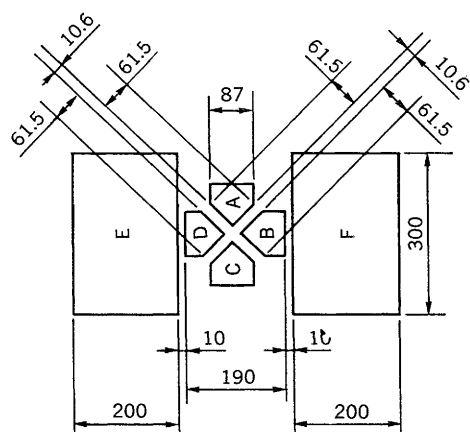
(Unit : mm)



1. Anode E
2. Common Cathode
3. Anode D
4. Anode C
5. Anode F
6. Common Cathode
7. Anode B
8. Anode A

CHIP PATTERN

(Unit : μm)



FEATURES

- Small clear mold package.
- Easy optical alignment because of accurate chip location.
- High Sensitivity. $S = 0.52 \text{ A/W TYP. @ } \lambda = 780 \text{ nm}$
- High element resistance.

APPLICATIONS

- Optical head for video and audio disk.
- Optical detector of tracking and focus signal.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| | | | |
|-----------------------|-----------|-------------|------------------|
| Reverse Voltage | V_R | 20 | V |
| Photo Current | I_L | 5 | mA |
| Forward Current | I_F | 10 | mA |
| Power Dissipation | P | 20 | mW |
| Operating Temperature | T_{opt} | -20 to +80 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40 to +100 | $^\circ\text{C}$ |

ELECTRO-OPTICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITIONS |
|---------------------------------|------------|------|------|------|-----------|--|
| Dark Current | I_D | | | 4 | nA | $V_R = 15\text{ V}$ |
| Sensitivity | S | 0.45 | 0.52 | | A/W | $V_R = 15\text{ V}, \lambda = 780\text{ nm}$ |
| Rise Time | t_r | | 1 | | ns | $V_R = 15\text{ V}, R_L = 1\text{ k}\Omega$ |
| Fall Time | t_f | | 1 | | ns | $V_R = 15\text{ V}, R_L = 1\text{ k}\Omega$ |
| Terminal Capacitance | C_1^* | | 1.6 | | pF | $V_R = 15\text{ V}, f = 1.0\text{ MHz}$ |
| Terminal Capacitance | C_2^{**} | | 1.9 | | pF | $V_R = 15\text{ V}, f = 1.0\text{ MHz}$ |
| Resistance between Each Element | R | 1.0 | | | $M\Omega$ | |

* : A to D Each element capacitance against cathode.

** : E, F Each element capacitance against cathode.