

Si Photo Diode Chip--ORT-2090PD

1. Scope:

- The specification applies to PIN silicon photo-diode chips.
- Type: ORT-2090PD

2. Structure:

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

3. Size: (90mil×90mil)

- Chip size : $(2290\mu\text{m} \times 2290\mu\text{m}) \pm 40\mu\text{m}$
- Chip thickness : $280\mu\text{m} \pm 20\mu\text{m}$
- Active area : $(2030\mu\text{m} \times 2030\mu\text{m}) \pm 20\mu\text{m}$
- Pad size : $\Phi 170\mu\text{m} \pm 10\mu\text{m}$
- Pattern drawing: per fig. 1

4. Electro-Optical Characteristics:

($T_a = +25^\circ\text{C}$)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100\text{mA}, H = 0$	0.5		1.3	V
Reverse Breakdown voltage	V_{BR}	$I_R = 100\mu\text{A}, H = 0$	35			V
Reverse Dark Current	I_D	$V_R = 10\text{V}, H = 0$			10	nA
Light Current	I_L	$V_R = 5\text{V}, \text{Has } 1\text{mw}/\text{cm}^2, @ 940\text{nm}$		135		μA
Peak Sensing wavelength	λ_P			940		nm

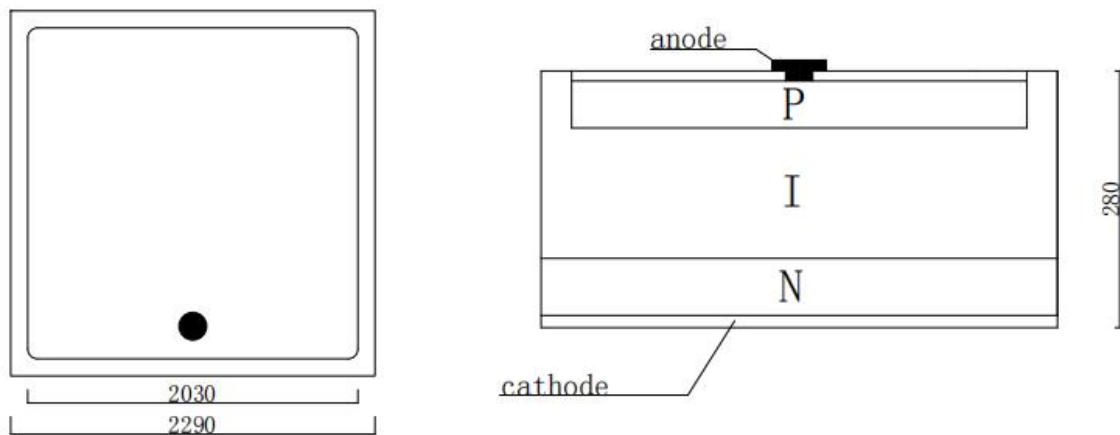


fig.1



5. Spectral Response

