

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0083A

2. Structure :

- 2-1. Planar type : PIN diode.
- 2-2. Electrodes :
Top side (Anode) : Aluminum alloy .
Back side (Cathode) : Gold alloy.

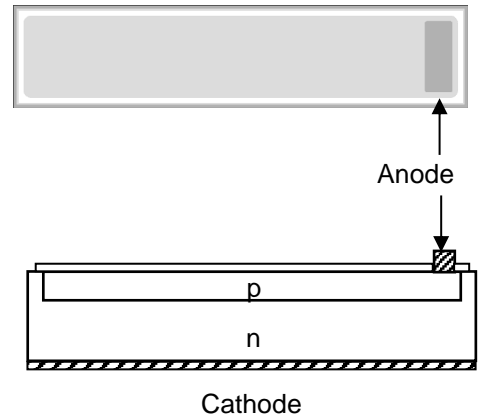
3. Size :

- 3-1. Chip size(including scribe lane) : 177.17 mil × 39.37 mil (4.50 mm × 1.00 mm).
- 3-2. Chip thickness : 12 mil ± 1.5 mil (0.305 mm ± 0.038mm).
- 3-3. Active area : 169.29 mil × 31.50 mil (4.30 mm × 0.80 mm).
- 3-4. Bonding pad (Anode) : 10.63 mil × 27.17 mil (0.27mm × 0.69 mm).
- 3-5. Pattern drawing : refer to the attached drawing.

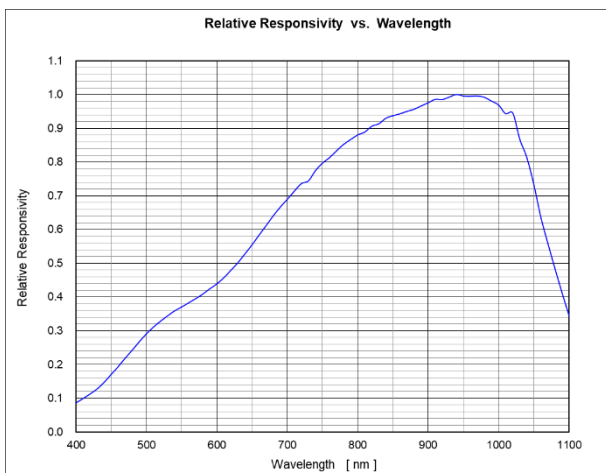
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse dark Current	I_D	$V_R=10V$ $E_e=0mW/cm^2$			20	nA
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	60			V
Forward voltage	V_f	$I_f=100mA$ $E_e=0mW/cm^2$			1.5	V
Total Capacitance	C_t	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		12		pF

*Based on 100% probing



5. Relative spectral responsivity



*Bare chip measured with integrating sphere, for reference only.