

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0049-B

2. Structure :

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

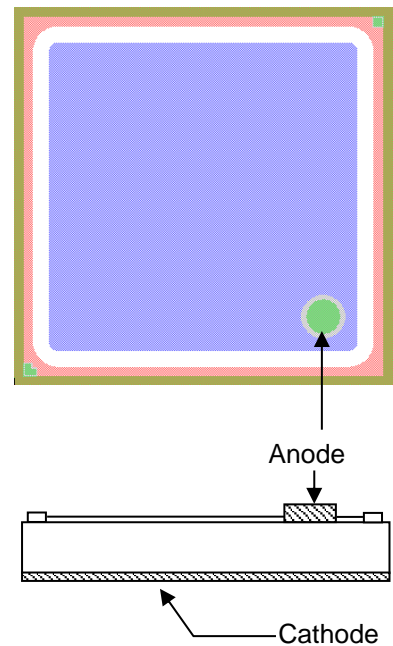
3. Size :

- 3-1. Chip size : 48.4 mils x 48.4 mils (1.230 mm x 1.230 mm).
- 3-2. Chip thickness : 15.75 ± 1.5 mils (0.400 ± 0.038 mm).
- 3-3. Active area : 39.4 mils x 39.4 mils (1.000 mm x 1.000 mm).
- 3-4. Bonding pad (Anode) : 5.5 mils x 5.5 mils (0.140 mm x 0.140 mm).
- 3-5. Pattern drawing : Refer to the attached drawing

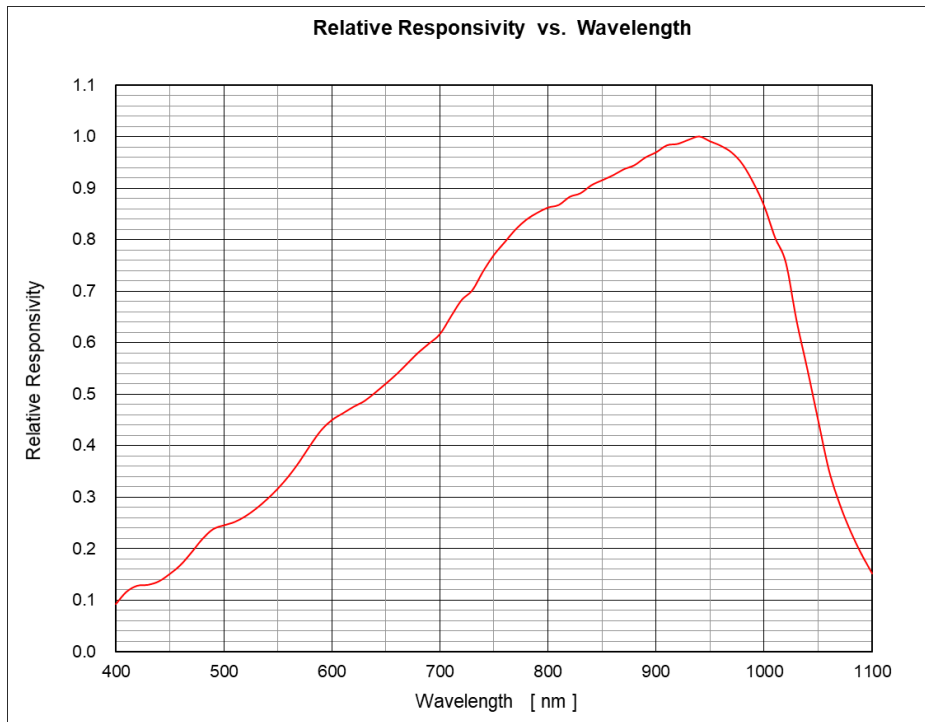
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark Current	I_D	$V_R=10V$ $E_e=0mW/cm^2$			5	nA
*Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu A$ $E_e=0mW/cm^2$	60			V
Open circuit voltage	V_{oc}	$T=2856K$ $E_e=5mW/cm^2$		350		mV
Short circuit Current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$		7		μA
Total Capacitance	C_t	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		12.5		pF
Responsivity	S	$V_R=5V$ $\lambda_p=850nm$		0.55		A / W

*Based on 100% probing



5. Relative spectral responsivity



³⁸ bare chip measured with integrating sphere, for reference only.