

1. Scope :

This specification applies to NIP silicon photodiode chips,
Device No. PD-40060C-B.

2. Structure :

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

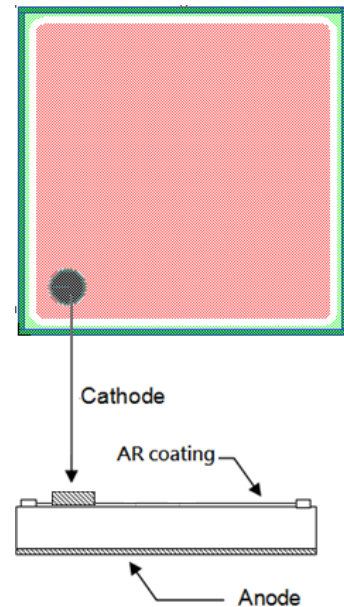
3. Size :

- 3-1. Chip size (including scribe lane): 60 mils x 60 mils (1.524 mm x 1.524 mm).
- 3-2. Chip thickness : 12 ± 1.0 mils (0.305mm \pm 0.025 mm).
- 3-3. Active area : 53.7 mils x 53.7 mils (1.364 mm x 1.364 mm).
- 3-4. Bonding pad (Cathode) : $6.4 \text{ mils} \pm 0.394 \text{ mils}$ (0.164 \pm 0.010 mm) Diameter.
- 3-5. Pattern drawing : refer to the attached drawing

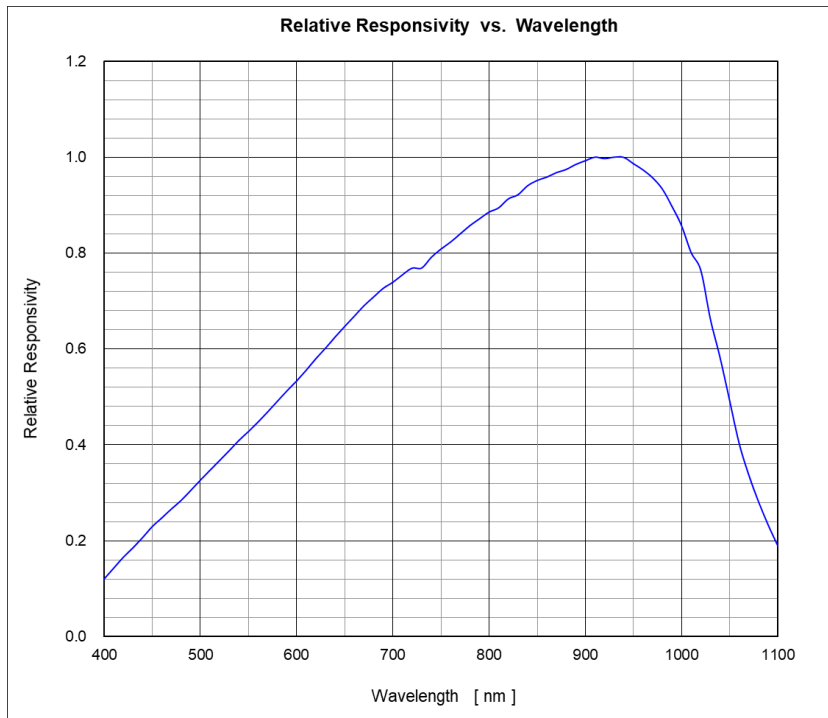
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark current	I_D	$V_R=10V$ $E_e=0mW/cm^2$			10	nA
*Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	60			V
*Forward Voltage	V_F	$I_F=10mA$ $E_e=0mW/cm^2$	0.7		1.3	V
Sensitivity	S	$V_R=5V$ $\lambda=940nm$		0.8		A/W
Open circuit voltage	V_{oc}	$I_F=0mA$ $\lambda=940nm$ $E_e=127 mW/cm^2$		400		mV
Short circuit Current	I_{sc}	$V_R=0V$ $\lambda=940nm$ $E_e=1 mW/cm^2$		14.5		μA
Reverse light current	I_L	$V_R=5V$ $\lambda=940nm$ $E_e=1 mW/cm^2$		14.8		μA

*Based on 100% probing



5. Relative spectral responsivity



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