

1. Scope :

This specification applies to NIP silicon photodiode chips,
Device No. PD-4160C-B

2. Structure :

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

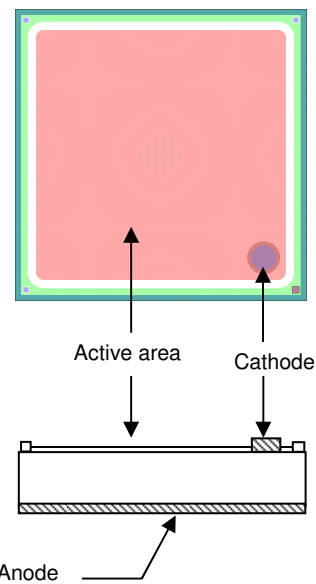
3. Size :

- 3-1. Chip size : 60 mils x 60 mils (1.524 mm x 1.524 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 51.3 mils x 51.3 mils (1.304 mm x 1.304 mm).
- 3-4. Bonding pad (Cathode) : Diameter $0.160 \text{ mm} \pm 0.01 \text{ mm}$
- 3-5. Pattern drawing : Refer to the attached drawing.

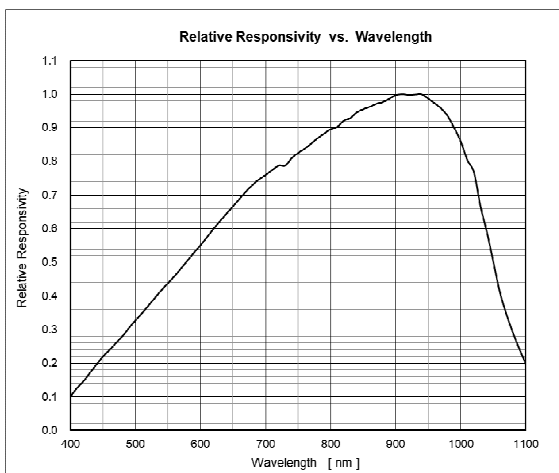
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
**Reverse dark current	I_D	$V_R=10V$ $E_e=0mW/cm^2$			10	nA
**Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	60			V
Open circuit voltage	V_{oc}	$T=2856K$ $E_e=5mW/cm^2$		350		mV
Short circuit Current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$		19		μA
Reverse light current	I_L	$V_R =5V$ $T=2856K$ $E_e=5mW/cm^2$		19		μA
Total Capacitance	C_t	$V_R =5V$ $E_e=0mW/cm^2$ $f=1MHz$		6.0		pF

**Based on 100% probing



5. Relative spectral responsivity



Bare chip measured, for reference only.