

1. Scope :

This specification applies to NIP silicon photodiode chips,
Device No. PD-2040.

2. Structure :

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

3. Size :

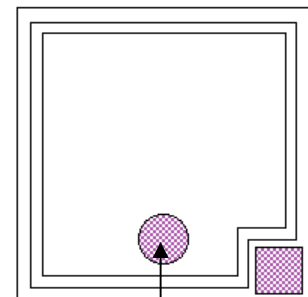
- 3-1. Chip size : 40 mils × 40 mils (1.016 mm × 1.016 mm).
3-2. Chip thickness : 8.6 ± 0.86 mils (0.220 ± 0.022 mm).
3-3. Active area : 33 mils × 33 mils (0.838 mm × 0.838 mm).
3-4. Bonding pad (Cathode) : 6.4 mils (0.162 mm) Diameter.
3-5. Pattern drawing : Refer to the attached drawing.

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

Parameters	Symbol	Conditions	Min.	Typ.	Max.	Unit
*Reverse Dark Current	I_D	$V_R=10V$ $E_e=0mW/cm^2$			10	nA
*Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	35			V
*Forward Voltage	V_F	$I_F=10mA$ $E_e=0mW/cm^2$			1.2	V
Reverse Light Current	I_L	$V_R=5V$ $T=2856K$ $E_e=5mW/cm^2$		6		μA
Open Circuit Voltage	V_{oc}	$T=2856K$ $E_e=5mW/cm^2$		300		mV
Short Circuit Current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$		6		μA
Total Capacitance	C_T	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		4		pF

*Based on 100% probing

Pattern drawing:



Cathode

