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 ℃)

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

※Based on 100% probing

Pattern drawing: