

1. Scope :

This specification applies to NIP silicon photodiode chips,
Device No. PD-4065

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 : 64.0 mils x 64.0 mils (1.630 mm x 1.630 mm).

3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).

3-3. Active area : 56.7 mils x 56.7 mils (1.44 mm x 1.44 mm).

3-4. Bonding pad (Cathode) : 10.0 mils x 10.0 mils (0.255 mm x 0.255 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}	$T = 2856K$ $E_e = 5mW/cm^2$		390		mV
Short circuit Current	I_{sc}	$T = 2856K$ $E_e = 5mW/cm^2$		21		μA
Reverse light current	I_L	$V_R = 5V$ $T = 2856K$ $E_e = 5mW/cm^2$		21		μA
Total Capacitance	C_t	$V_R = 5V$ $E_e = 0mW/cm^2$ $f = 1MHz$		10		pF
Turn-on/ Turn-off time	ton/toff	$V_R = 5V$ $R_L = 50\Omega$ $\lambda = 850nm$		45/50		nS

*Based on 100% probing

