

**1. Scope :**

This specification applies to PIN silicon photodiode chips,  
Device No. PD-0070

**2. Structure :**

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

**3. Size :**

- 3-1. Chip size : 70 mils × 70 mils ( 1.780 mm × 1.780 mm ).
- 3-2. Chip thickness : 12 ± 1.5 mils ( 0.305 ± 0.038 mm).
- 3-3. Active area : 60 mils × 60 mils ( 1.520 mm × 1.520 mm ).
- 3-4. Bonding pad ( Anode ) : 6 mils ( 0.150 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	$I_D$	$V_R=10V$ $E_e=0mW/cm^2$			30	nA
**Reverse breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	33			V
Open circuit voltage	$V_{oc}$	$T=2856K$ $E_e=5mW/cm^2$		390		mV
Short circuit Current	$I_{sc}$	$T=2856K$ $E_e=5mW/cm^2$	18	22		$\mu A$
Reverse light current	$I_L$	$V_R=5V$ $T=2856K$ $E_e=5mW/cm^2$	18	22		$\mu A$
Total Capacitance	$C_t$	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		7		pF
Turn-on/turn-off time	$t_{on}/t_{off}$	$V_R=5V$ $R_L=50\Omega$ $\lambda=850nm$		50/50		nS

\*\*Based on 100% probing

