

**1. Scope :**

This specification applies to PIN silicon photodiode chips, Device No. PD-0394.

**2. Structure :**

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

**3. Size :**

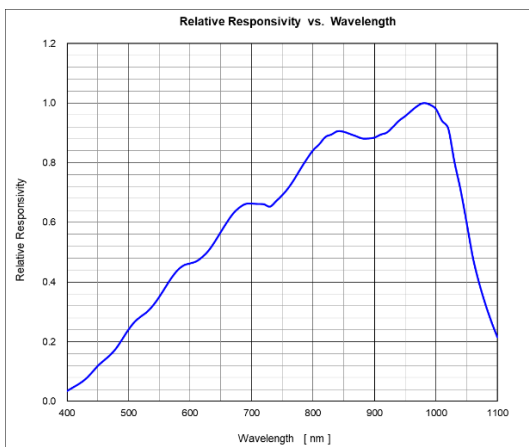
- 3-1. Chip size : 393.7 mils × 393.7 mils ( 10 mm × 10 mm ) .
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm ) .
- 3-3. Active area : 370 mils × 370 mils (9.4 mm × 9.4 mm ) .
- 3-4. Bonding pad : Anode 7.5 mils (0.190 mm) width of metal line.  
 Cathode : 7.87 mils × 45.7 mils (0.20 mm × 1.16 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	$I_D$	$V_R=5V$ $E_e=0mW/cm^2$			100	nA
Open circuit voltage	$V_{OC}$	$E_e=5mW/cm^2$ $T=2856K$		450		mV
*Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	10			V
Total Capacitance	$C_T$	$V_R=0V$ $E_e=0mW/cm^2$ $f=1MHz$		700		pF
Short circuit Current	$I_{SC}$	$V_R=0V$ $E_e=5mW/cm^2$ $T=2856K$		750		$\mu A$

\*Based on 100% probing

**5. Relative spectral responsivity**



\*Bare chip measured with integrating sphere, for reference only.

