

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-31073

2. Structure :

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

3. Size :

- 3-1. Chip size : 71.8 mils × 71.8 mils (1.824 mm × 1.824 mm).
- 3-2. Chip thickness : 4.9 ± 1.0 mils (0.125 ± 0.025 mm).
- 3-3. Active area : 61.81 mils × 61.81 mils (1.57 mm × 1.57 mm).
- 3-4. Bonding pad (Anode) : 6 mils × 6 mils (0.153 mm × 0.153 mm)
 (Cathode) : 7.5 mils × 8.8 mils (0.190 mm × 0.224 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}	$T = 2856K$ $E_e = 5mW/cm^2$		410		mV
Short circuit Current	I_{sc}	$T = 2856K$ $E_e = 5mW/cm^2$		29		μA
Reverse light current	I_L	$V_R = 5V$ $T = 2856K$ $E_e = 5mW/cm^2$		29		μA
Total Capacitance	C_t	$V_R = 5V$ $E_e = 0mW/cm^2$ $f = 1MHz$		36		pF
Turn-on/ Turn-off Time	ton/toff	$V_R = 2V$ $R_L = 200\Omega$ $\lambda = 905nm$		250/550		nS

*Based on 100% probing

