

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-3162

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 : 90.6 mils x 289.4 mils (2.300 mm x 7.350 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : Small: 78.7 mils x 78.7 mils (2.000 mm x 2.000 mm).
Large: 78.7 mils x 196.9 mils (2.000 mm x 5.000 mm).
- 3-4. Bonding pad (Anode) : 9.8 mils x 9.8 mils (0.250 mm x 0.250 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}	small		45		μA
		large	$T=2856K$ $E_e=5mW/cm^2$	115		
Reverse light Current	I_L	small		45		μA
		large	$V_R = 5V$ $T=2856K$ $E_e=5mW/cm^2$	115		
Total Capacitance	C_t	small		8		pF
		large	$V_R = 5V$ $E_e=0mW/cm^2$ $f=1MHz$	13		

*Based on 100% probing

