

1. Scope :

This specification applies to high speed photodiode chips,
Device No. PD-1240.

2. Structure :

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

3. Size :

- 3-1. Chip size : 40 mils × 40 mils (1.016 mm × 1.016 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 32 mils × 32 mils (0.813 mm × 0.813 mm).
- 3-4. Bonding pad (Anode) : 6.4 mils × 6.4mils (0.162mm × 0.162 mm) .
 (Cathode) : 6 mils × 6 mils (0.152mm × 0.152mm)
- 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	$V_{(BR)R}$	$I_R=100 \mu A$ $E_e=0mW/cm^2$	33			V
Open circuit voltage	V_{oc}	$T=2856K$ $E_e=5mW/cm^2$		410		mV
Short circuit Current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$		7		μA
Reverse light current	I_L	$V_R = 5V$ $T=2856K$ $E_e=5mW/cm^2$		7		μA
Total Capacitance	C_T	$V_R = 5V$ $E_e=0mW/cm^2$ $f=1MHz$		6		pF
Turn-on/ Turn-off Time	ton/toff	$V_R=3V$ $R_L=50 \Omega$ $\lambda_p=905nm$		20/20		nS

*Based on 100% probing

