

1. Scope :

This specification applies to high speed photodiode chips,
Device No. PD-1075

2. Structure :

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

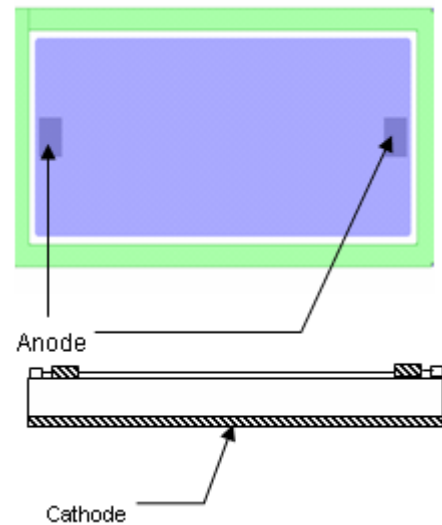
3. Size :

- 3-1. Chip size : 110 mils × 52 mils (2.794 mm × 1.321 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 98 mils × 40 mils (2.489 mm × 1.016 mm).
- 3-4. Bonding pad (Anode) : 6 mils × 8 mils (0.153 mm × 0.203 mm)
- 3-5. Pattern drawing : Refer to the attached drawing.

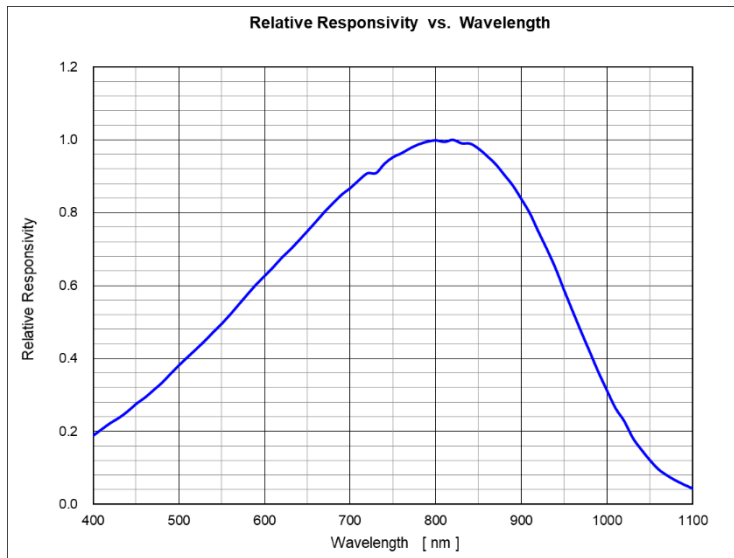
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark current	I_D	$V_R=20V$ $E_e=0mW/cm^2$			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}	$T=2856K$ $E_e=5mW/cm^2$		350		mV
Short circuit Current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$		19.5		μA
Reverse light current	I_L	$V_R =5V$ $T=2856K$ $E_e=5mW/cm^2$		19.5		μA
Total Capacitance	C_t	$V_R =3V$ $E_e=0mW/cm^2$ $f=1MHz$		12		pF
Turn-on/ Turn-off Time	ton/toff	$V_R=3V$ $R_L=50\Omega$ $\lambda_p=905nm$		30/30		nS

*Based on 100% probing



5. Relative spectral responsivity



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