1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0120A

2. Structure :

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

3. Size :

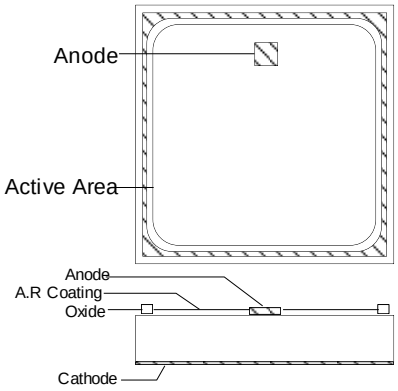
3-1. Chip size : 120 mils × 120 mils (3.000 mm × 3.000 mm).
3-2. Chip thickness : 12 ±1.5mils (0.305 ± 0.038 mm).
3-3. Active area : 107 mils × 107 mils (2.675 mm × 2.675 mm).
3-4. Bonding pad (Anode) : 9 mils × 9 mils (0.225 mm × 0.225 mm).
3-5. Pattern drawing : Refer to the attached drawing.

4. Electro-optical characteristics (Ta = 25℃)

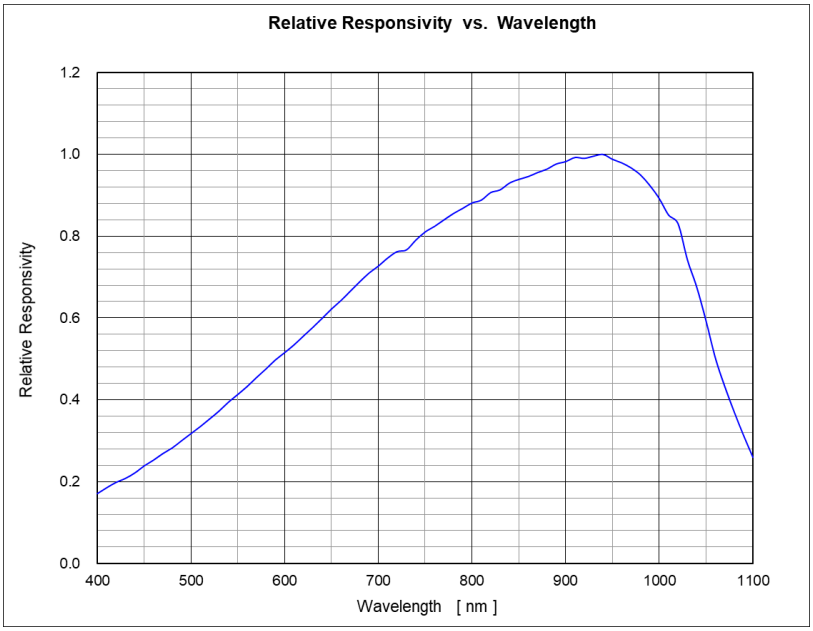
Parameter	Symbol	Condition		Min.	Typ.	Max.	Unit
※Reverse dark current	I_D	V_R=10V Ee=0mW/cm²				30	nA
※Reverse breakdown voltage	$V_{(BR)R}$	I_R=100uA Ee=0mW/cm²		60			V
Open circuit voltage	Voc	T=2856K Ee=5mW/cm²			350		mV
Short circuit Current	Isc	T=2856K Ee=5mW/cm²			73		μA
Reverse light current	I_L	V_R =5V T=2856K Ee=5mW/cm²			73		μA
Total Capacitance	C_t	V_R =5V Ee=0mW/cm² f=1MHz			19		pF
Resposivity	Rϕ	V_R=10V	λ=940nm		0.6		A/W
			λ=880nm		0.55		
			λ=650nm		0.3		
Turn-on/Turn-off Time	ton/toff	V_R=10V R_L=1KΩ	λ=940nm		1000/1000		nS
			λ=880nm		200/200		
			λ=650nm		80/80		
Turn-on/Turn-off Time	ton/toff	V_R=5V R_L=50Ω	λ=850nm		50/50		nS

※Based on 100% probing

PATTERN DRAWING
UNIT:mil



5. Relative spectral responsivity



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