1. Scope :

This specification applies to PIN silicon UV-enhanced photodiode chips,
Device No. PD-0120U.

2. Structure :

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

3. Size :

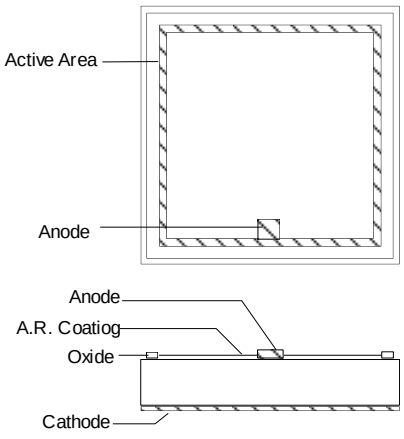
3-1. Chip size : 117 mils x 117 mils (2.970 mm x 2.970 mm).
3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
3-3. Active area : 97.2 mils x 97.2 mils (2.470 mm x 2.470 mm).
3-4. Bonding pad (Anode) : 7.9 mils x 7.9 mils (0.200mm x 0.200mm).
3-5. Pattern drawing : Refer to the attached drawing.

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

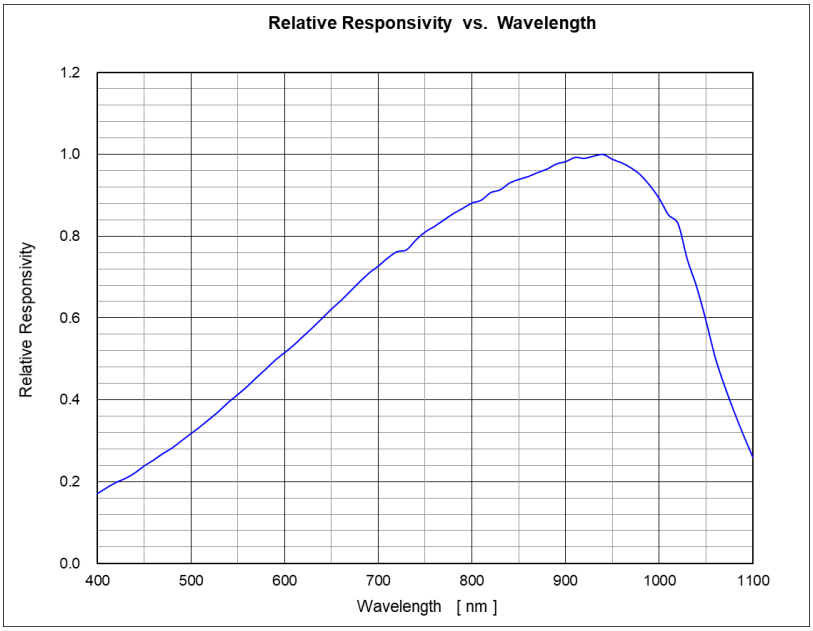
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
※Reverse dark Current	I_D	V_R=10V Ee=0mW/cm²			30	nA
※Reverse breakdown voltage	$V_{(BR)R}$	I_R=100uA Ee=0mW/cm²	33			V
Open circuit Voltage	Voc	T=2856K Ee=5mW/cm²		350		mV
Short circuit current	Isc	T=2856K Ee=5mW/cm²	40	60		μA
Reverse light Current	I_L	V_R =5V T=2856K Ee=5mW/cm²	40	60		μA
Total Capacitance	C_t	V_R =5V Ee=0mW/cm² f=1MHz		17		pF
Turn-on/Turn-off Time	ton/toff	V_R=5V R_L=50Ω λ=850nm		50/50		nS
Sensitivty Wavelength Range	λ	-	300		1100	nm
Peak sensitivity wavelength	λp	-		940		nm

※Based on 100% probing

PATTERN DRAWING
UNIT:mil



5. Relative spectral responsivity



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