

1. Scope :

This specification applies to PIN silicon UV-enhanced photodiode chips,
Device No. PD-31105AU-B.

2. Structure :

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

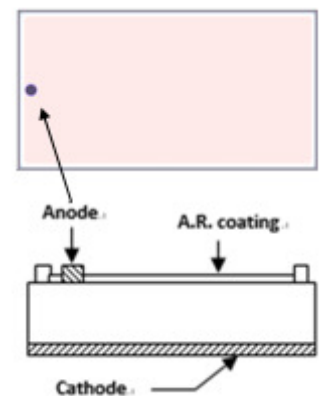
3. Size :

- 3-1. Chip size(including scribe lane) :146.06mils × 75.19 mils (3.710 mm × 1.910 mm).
- 3-2. Chip size(After dicing) :145.28mils × 74.41 mils±1.2mils (3.690 mm × 1.890 mm±0.030mm).
- 3-3. Chip thickness : 8.66 ± 0.79 mils (0.220 ± 0.02mm).
- 3-4. Active area : 140.15 mils ×69.29 mils (3.560mm × 1.760 mm).
- 3-5. Bonding pad (Anode) : 4.3 mils (0.110 ± 0.010mm) Diameter.
- 3-6. Pattern drawing : Refer to the attached drawing.

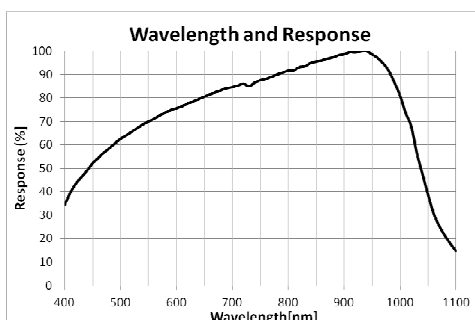
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark current	ID	VR=10V Ee=0mW/cm ²			10	nA
*Reverse breakdown voltage	V(BR)R	IR=100uA Ee=0mW/cm ²	40			V
*Forward Voltage	VF	IF=20mA Ee=0mW/cm ²			1.2	V
Total Capacitance	Ct	VR = 0V Ee=0mW/cm ² f=1MHz		65		pF
Reverse light current	IL	VR =5V 940nm Ee=1mW/cm ²		34		μA
Reverse light current	IL	VR =5V 525nm Ee=1mW/cm ²		23		μA

*Based on 100% probing



5. Relative spectral responsivity



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