

1. Scope :

This specification applies to PIN silicon UV-enhanced photodiode chips,
Device No. PD-31118BU-B.

2. Structure :

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

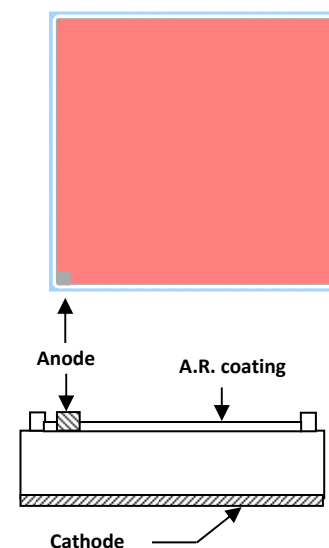
3. Size :

- 3-1. Chip size(including scribe lane): 118 mils × 118 mils (3.000 mm × 3.000 mm).
- 3-2. Chip thickness : 8.66 ± 1.0 mils (0.220 ± 0.025mm).
- 3-3. Active area : 111.8 mils × 111.8 mils (2.840 mm × 2.840 mm).
- 3-4. Bonding pad (Anode) : 5.7 mils × 5.7 mils (0.145 mm × 0.145 mm).
- 3-5. Pattern drawing : Refer to the attached drawing.

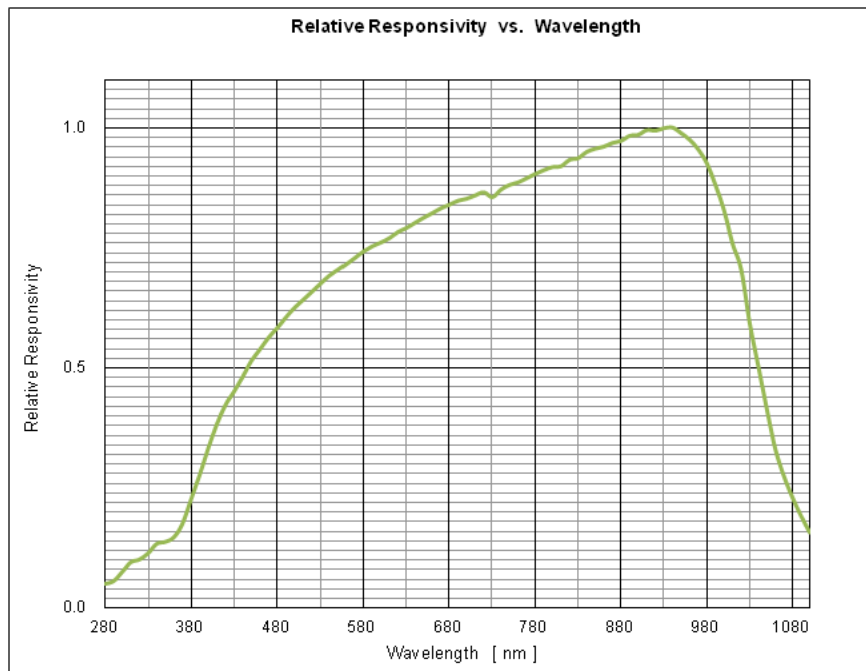
4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark current	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 =5V Ee=0mW/cm ² f=1MHz		19		pF
Absolute spectral Sensitivity	S	VR =0V λ =940 nm		0.63		A/W
Sensitivity Wavelength Range	λ	-	280		1100	nm

*Based on 100% probing



5. Relative spectral responsivity



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