

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-30153-B.

2. Structure :

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

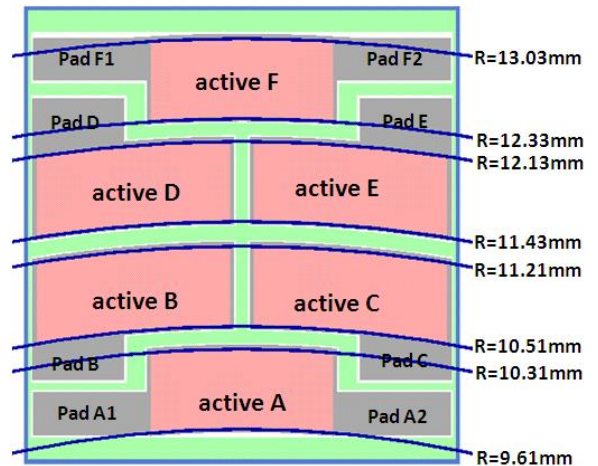
3. Size :

- 3-1. Chip size (including scribe line) : 3.80 mm × 4.00 mm.
- 3-2. Chip thickness : 0.305 mm ± 0.025 mm.
- 3-3. Active area :
A : 1.60 mm x 0.70 mm ; R₁=9.61mm, R₂=10.31mm.
B & C : 1.70 mm x 0.70 mm ; R₁=10.51mm, R₂=11.21mm.
D & E : 1.70 mm x 0.70 mm ; R₁=11.43mm, R₂=12.13mm.
F : 1.60 mm x 0.70 mm ; R₁=12.33mm, R₂=13.03mm.
- 3-4. Bonding pad (Anode) : A1 & A2 : 1.005 mm x 0.37 mm.
B & C : 0.795 mm x 0.282 mm.
D & E : 0.795 mm x 0.404 mm.
F1 & F2 : 0.990 mm x 0.370 mm.
- 3-5. Pattern drawing : refer to the attached drawing.

4. Electro-optical characteristics_ one chip (Ta = 25 °C)

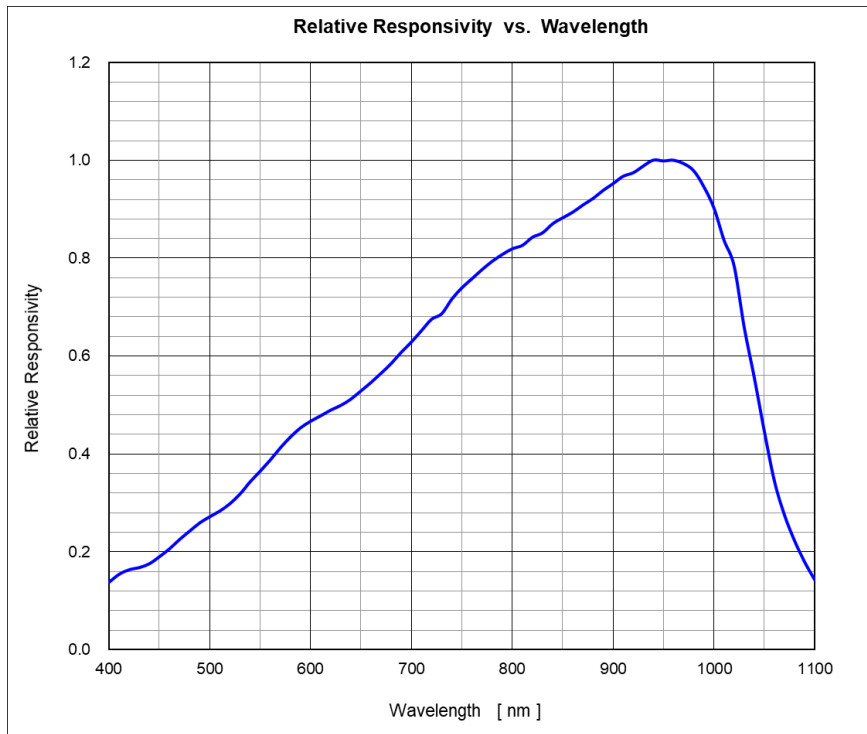
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse dark Current	I _D	V _R =20V E _e =0mW/cm ²			10	nA
Reverse breakdown voltage	V _{(BR)R}	I _R =100uA E _e =0mW/cm ²	60			V
Forward Voltage	V _F	I _F =20mA E _e =0mW/cm ²			1.2	V
Open circuit Voltage	V _{oc}	T=2856K E _e =5mW/cm ²		395		mV
Total Capacitance	C _t	V _R =5V E _e =0mW/cm ² f=1MHz		9		pF

*Based on 100% probing



5. Relative spectral responsivity





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