

**1. Scope :**

This specification applies to ambient light photo diode chips,  
Device No. PD-50120C-B

**2. Structure :**

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

**3. Size :**

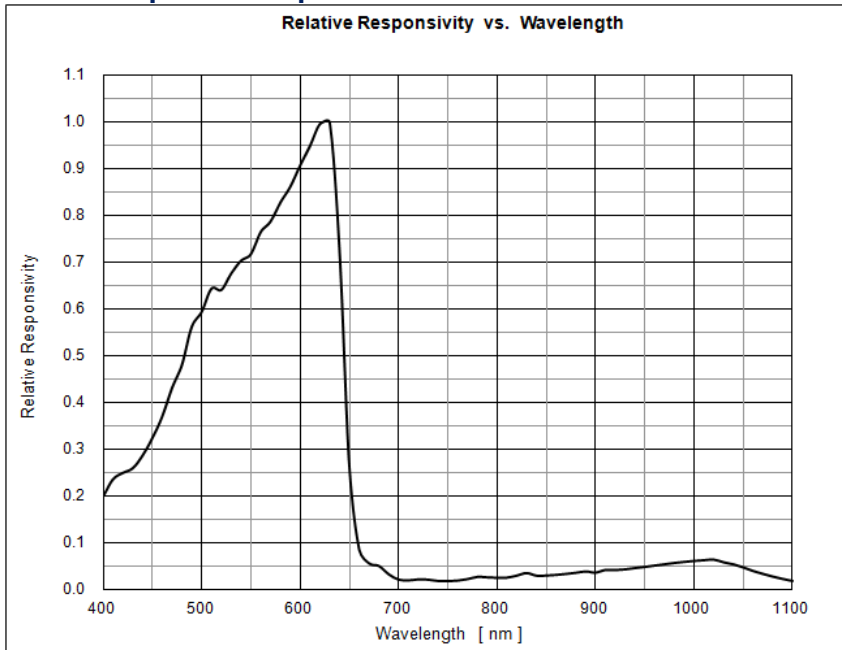
- 3-1. Chip size : 125 mils × 125 mils ( 3.175 mm × 3.175 mm ).
- 3-2. Chip thickness : 12 ± 1.5mils ( 0.305 ± 0.038 mm ).
- 3-3. Active area : 112 mils × 112 mils ( 2.840 mm × 2.840 mm ).
- 3-4. Bonding pad ( Anode ) : 8 mils ( 0.200mm ) Diameter.
- 3-5. Pattern drawing : Refer to the attached drawing.

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
*Reverse dark Current	$I_D$	$V_R=10V$ $E_e=0mW/cm^2$			30	nA
*Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	30			V
Spectral Response	$\lambda_p$	---		620		nm

\*Based on 100% probing

**5. Relative spectral response**



\*Bare chip measured without integrating sphere, for reference only.

