

**1. Scope :**

This specification applies to high speed photodiode chips,  
Device No. PD-1179

**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 : 179.5 mils × 179.5 mils ( 4.560 mm × 4.560 mm ).
- 3-2. Chip thickness : 12 ± 1.5mils ( 0.305 ± 0.038mm ).
- 3-3. Active area : 78.8 mils × 39.4 mils ×6 ( 2.000 mm × 1.000 mm ×6 ).
- 3-4. Bonding pad (Anode) : 9.8 mils × 9.8 mils ( 0.250 mm × 0.250 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	$I_D$	$V_R=20V$ $E_e=0mW/cm^2$			20	nA
*Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	33			V
Open circuit Voltage	$V_{oc}$	$T=2856K$ $E_e=5mW/cm^2$		440		mV
Short circuit Current	$I_{sc}$	$T=2856K$ $E_e=5mW/cm^2$		15		$\mu A$
Reverse light Current	$I_L$	$V_R =5V$ $T=2856K$ $E_e=5mW/cm^2$		15		$\mu A$
Total Capacitance	$C_t$	$V_R =5V$ $E_e=0mW/cm^2$ $f=1MHz$		11.5		pF

\*Based on 100% probing

