

1. Scope :

This specification applies to PIN silicon UV-enhanced photodiode chips,
Device No. PD-0120UT.

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 : 117 mils x 234 mils (2.970 mm x 5.940 mm).

3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).

3-3. Active area : 97.2 mils x 97.2 mils (2.470 mm x 2.470 mm) x 2 elements.

3-4. Bonding pad (Anode) : 7.9 mils x 7.9 mils (0.200mm x 0.200mm).

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	$V_{(BR)R}$	$I_R=100\mu A$ $E_e=0mW/cm^2$	33			V
Open circuit Voltage	V_{oc}	$T=2856K$ $E_e=5mW/cm^2$		350		mV
Short circuit current	I_{sc}	$T=2856K$ $E_e=5mW/cm^2$	40	60		μA
Reverse light Current	I_L	$V_R=5V$ $T=2856K$ $E_e=5mW/cm^2$	40	60		μA
Total Capacitance	C_t	$V_R=5V$ $E_e=0mW/cm^2$ $f=1MHz$		17		pF
Turn-on/Turn-off Time	ton/toff	$V_R=5V$ $R_L=50\Omega$ $\lambda=850nm$		50/50		nS
Sensitivity Wavelength Range	λ	-	300		1100	nm
Peak sensitivity wavelength	λ_p	-		940		nm

*Based on 100% probing

