

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-1100

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-1100

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 : 100 mils × 100 mils (2.540 mm × 2.540 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 90 mils × 90 mils (2.250 mm × 2.250 mm).
- 3-4. Bonding pad (Anode) : 5.5 mils × 5.5 mils (0.14 mm × 0.14 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 H=0mw/cm ²		5	30	nA
Reverse breakdown Voltage	V(BR)R	IR=100uA H=0mw/cm ²	33	170		V
Open circuit voltage	Voc	CT=2870° K H=5mw/cm ²		390		mV
Short circuit Current	Isc	CT=2870° K H=5mw/cm ²	35	50		μA
Reverse light current	IL	VR =5V CT=2870° K H=5mw/cm ²	35	50		μA
Total Capacitance	Ct	VR =5V H=0mw/cm ² f=1MHz		18		pF
Turn-on/ turn-off Time	ton/toff	VR=10V RL=1000Ω		45/45		nS

