

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-0099

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0099

2. Structure :

- 2-1. Planar type : pin diode.
- 2-2. Electrodes :
Top side (Anode) : aluminum alloy .

3. Size :

- 3-1. Chip size : 100 mils × 100 mils (2.54 mm × 2.54 mm).
- 3-2. Chip thickness : 17.7 ± 1.0 mils (0.450 ± 0.025 mm).
- 3-3. Active area : 90 mils × 90 mils (2.280 mm × 2.280 mm).
- 3-4. Bonding pad (anode , cathode) : 9 mils × 9 mils (0.228mm× 0.228 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	$V_R=10V$ $H=0\text{mw/cm}^2$		5	30	nA
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$ $H=0\text{mw/cm}^2$	33	170		V
Open circuit Voltage	V_{oc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		350		mV
Short circuit Current	I_{sc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		51		μA
Reverse light Current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		51		μA
Total Capacitance	C_t	$V_R=3V$ $H=0\text{mw/cm}^2$ $f=1\text{MHZ}$		12		pF
Turn-on/ Turn-off Time	ton/toff	$V_R=2V$ $R_L=200\Omega$ $\lambda=905\text{nm}$		250/550		nS

