

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-1073

1. Scope :

This specification applies to high speed photodiode chips,
Device No. PD-1073

2. Structure :

- 2-1. Planar type : Pin diode.
- 2-2. Electrodes : Top side (Anode) : Aluminum alloy .

3. Size :

- 3-1. Chip size : 72 mils × 72 mils (1.824 mm × 1.824 mm).
- 3-2. Chip thickness : 12 ± 1.5 mils (0.305 ± 0.038 mm).
- 3-3. Active area : 62 mils × 62 mils (1.570 mm × 1.570 mm).
- 3-4. Bonding pad (Anode) : 6 mils × 6 mils (0.153 mm × 0.153 mm)
(Cathode) : 6 mils × 6 mils (0.153 mm × 0.153 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	$V_R=10V$ $H=0\text{mw/cm}^2$			10	nA
Reverse breakdown voltage	$V(BR)_R$	$I_R=100\mu A$ $H=0\text{mw/cm}^2$	60	170		V
Open circuit voltage	V_{oc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		410		mV
Short circuit Current	I_{sc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		13		μA
Reverse light current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		13		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	T_{on}/t_{off}	$V_R=3V$ $R_L=50\Omega$ $\lambda_P=905\text{nm}$		30/30		ns

