

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-3073

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-3073

2. Structure :

2-1. Planar type : Pin diode.

2-2. Electrodes :

Top side (Anode) : Aluminum alloy .

(Cathode) : Aluminum alloy .

3. Size :

3-1. Chip size : 71.8 mils × 71.8 mils (1.824 mm × 1.824 mm).

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

3-3. Active area : 61.81 mils × 61.81 mils (1.57 mm × 1.57 mm).

3-4. Bonding pad (Anode) : 6 mils × 6 mils (0.153 mm × 0.153 mm)

(Cathode) : 7.5 mils × 8.8 mils (0.190 mm × 0.224 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}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		29		μA
Reverse light current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		29		μA
Total Capacitance	C_t	$V_R=5V$ $H=0\text{mw/cm}^2$ $f=1\text{MHz}$		12		pF
Turn-on/ Turn-off Time	$T_{on/toff}$	$V_R=2V$ $R_L=200\Omega$ $\lambda=905\text{nm}$		250/550		ns

