

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-0065

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0065

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 : 64 mils × 64 mils (1.63 mm × 1.63 mm).

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

3-3. Active area : 56.7 mils × 56.7 mils (1.44 mm × 1.44 mm).

3-4. Bonding pad (Anode) : 10 mils × 10 mils (0.255 mm × 0.255 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	250		V
Open circuit voltage	V_{oc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		390		mV
Short circuit Current	I_{sc}	$C_T=2870^\circ K$ $H=5\text{mw/c}$		20		μA
Reverse light current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/c}$ m^2		20		μA
Total Capacitance	C_t	$V_R=3V$ $H=0\text{mw/c}$ m^2 $f=1\text{MHz}$		8		pF
Turn-on/ Turn-off time	ton/toff	$V_R=2V$ $R_L=200\Omega$ $\lambda=905\text{nm}$		200/400		nS

