

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-0324

1. Scope :

This specification applies to PN silicon photodiode chips,
Device no. PD-0324.

2. Structure :

2-1. Planar type : PN diode.

2-2. Electrodes :

Top side (Anode) : Aluminum alloy .

Back side (Cathode) : Gold alloy.

3. Size :

3-1. Chip size : 24 mils × 24 mils (0.610 mm × 0.610 mm).

3-2. Chip thickness : 7.5 ± 1.5 mils (0.19 ± 0.038 mm).

3-3. Active area : 17 mils × 17 mils (0.432 mm × 0.432 mm).

3-4. Bonding pad (Anode) : 5.0 mils (0.127 mm) diameter.

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	$V_{(BR)R}$	$I_R=100\mu A$ $H=0\text{mw/cm}^2$	33			V
Open circuit Voltage	V_{oc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		420		mV
Short circuit Current	I_{sc}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		1.5		μA
Reverse light current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/cm}^2$	1.8	2.0	2.2	μA
Total Capacitance	C_t	$V_R=5V$ $H=0\text{mw/cm}^2$ $f=1\text{MHz}$		5		pF
Series Resistance	R_s	$V_R=5V$ $H=0\text{mw/cm}^2$ $f=1\text{MHz}$		200		Ω
Forward Voltage	V_F	$I_F=20\text{mA}$ $H=0\text{mw/cm}^2$			1.3	V

