

SILICON PHOTODIODE CHIPS

DEVICE NO.: PD-0240

1. Scope:

This specification applies to PN silicon photodiode chips,
Device NO. PD-0240.

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: 40 mils × 40 mils (1.016 mm × 1.016 mm).

3-2. Chip thickness: 8.6 ± 1.2 mils (0.220 ± 0.030 mm).

3-3. Active area: 32 mils × 32 mils (0.813 mm × 0.813 mm).

3-4. Bonding pad (Anode) : 5.4 mils (0.137 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	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}	$C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		7		μA
Reverse light Current	I_L	$V_R=5V$ $C_T=2870^\circ K$ $H=5\text{mw/cm}^2$		7		μA
Total Capacitance	C_T	$V_R=5V$ $H=0\text{mw/cm}^2$ $f=1\text{MHz}$		21		pF

