

SILICON PHOTODIODE CHIPS

DEVICE NO. : PD-0394

1. Scope :

This specification applies to PIN silicon photodiode chips,
Device No. PD-0394.

2. Structure :

2-1. Planar type : PIN diode.

2-2. Electrodes :

Top side : aluminum alloy .

Back side (cathode) : gold alloy.

3. Size :

3-1. Chip size : 393.7 mils × 393.7 mils (10 mm × 10 mm) .

3-2. Chip thickness : 15 ± 1.5 mils (0.38 ± 0.038 mm).

3-3. Active area : 370 mils × 370 mils (9.4 mm × 9.4 mm).

3-4. Bonding pad : anode 7.5mils (0.19 mm) width.

Cathode : 7.87 mils × 45.7 mils (0.2mm× 1.16mm).

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	$V_R=5V$ $H=0\text{mw/cm}^2$			100	nA
Open circuit voltage	V_{oc}	$H=5\text{mw/cm}^2$ $C_T=2870^\circ\text{K}$		350		mV
Reverse Voltage	V_R	$I_R=100\mu A$ $H=0\text{mw/cm}^2$	10			V
Total Capacitance	C_T	$V_R=0V$ $H=0\text{mw/cm}^2$ $f=1\text{MHZ}$		800		pF
Short circuit Current	I_{sc}	$V_R=0V$ $H=5\text{mw/cm}^2$ $C_T=2870^\circ\text{K}$		750		μA

