

Si Photo-diode Chip—TK0N51PDN

1. Scope

- The specification applies to NIP silicon photo-diode chips.
- Type : TK0N51PDN

2. Structure

- NIP planar type.
- Electrode topside (cathode) : Aluminum.
backside (anode) : Gold alloy.

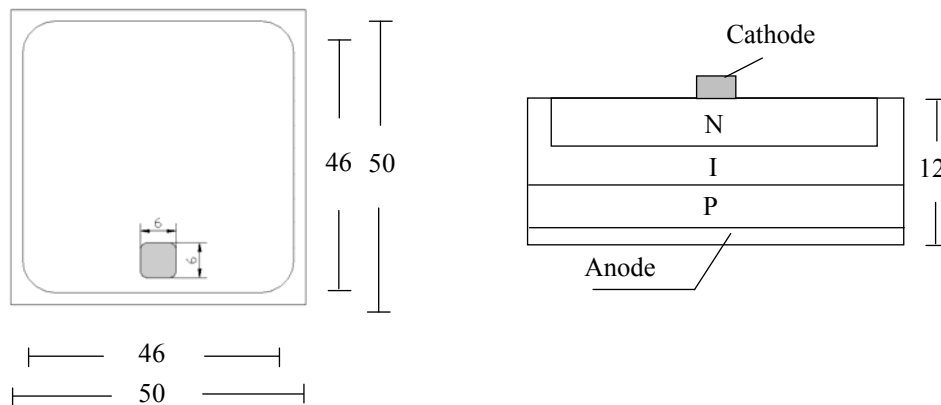
3. Size

- Chip size : 50mil × 50mil ± 2mil (1.270mm × 1.270mm ± 0.05mm)
- Thickness : 12mil ± 1mil (0.300mm ± 0.025mm)
- Active area : 46mil × 46mil (1.168mm × 1.168mm)
- Pattern drawing : per fig. 1

4. Electro-Optical Characteristics

(Ta = +25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit.
Forward Voltage	V_F	$I_F=10\text{mA}$, $H=0$	0.5		1.3	V
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$, $H=0$	35			V
Reverse Dark Current	I_D	$V_R=10\text{V}$, $H=0$			10	nA
Light Current	I_L	$V_R=5\text{V}$, H as $1\text{mw}/\text{cm}^2$ @940nm		43		μA
Peak Sensing Wavelength	λ_p			940		nm
Junction Capacitance	C_J	$V_R=3\text{V}$, $H=0$, $F=1\text{ MHz}$		2.8		pF



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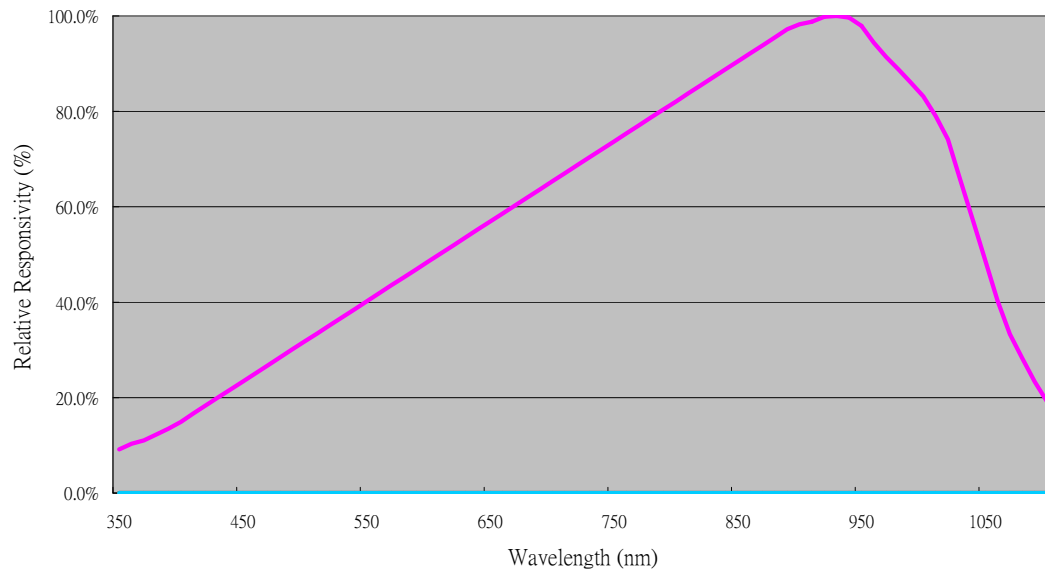
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5. Spectral Response



Unit : mil

fig. 1

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