

PIN Photodiode

KODENSHI

HPI - 147A66

The HPI-147A66 is a silicon PIN photodiode has four active areas (photodiodes)integrated in one chip.

FEATURES

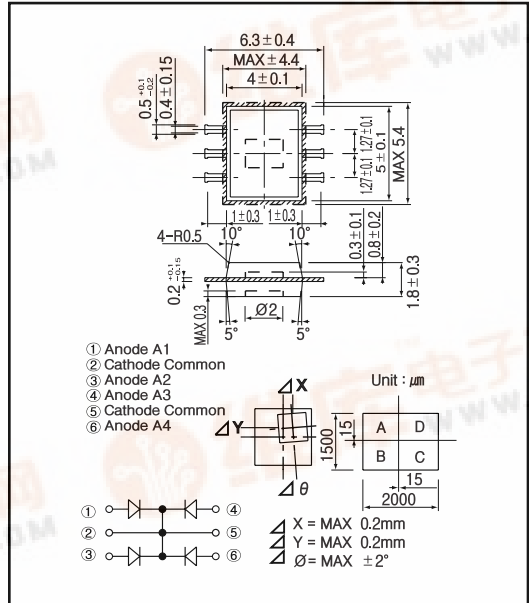
- Four segmented photodiodes/Flat plastic package
- High speed response

APPLICATIONS

- X - Y position sensors

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Power dissipation	$P_b$	30	mW
Operating temp.	$T_{opr.}$	- 25 ~ +85	
Storage temp.	$T_{stg.}$	- 40 ~ +100	
Soldering temp. <sup>*)</sup>	$T_{sol.}$	260	

\*1. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25 )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	$I_L$	$V_R=10V, E=1000lx^{-2}$	7.0			$\mu\text{A}$
Sensitivity	S	$V_R=10V, p=680nm$	0.43	0.48		A/W
Dark current	$I_d$	$V_R=10V$			10	nA
Capacitance	$C_t$	$V_R=10V, f=1MHz$		5.0		pF
Spectral sensitivity				450~1050		nm
Peak wavelength	$p$			800		nm
Half angle				$\pm 65$		deg.
Rise time	$t_r$	$V_R=10V, R_L=1k$		10		ns
Fall time	$t_f$	$p=780\sim 800nm$		10		ns

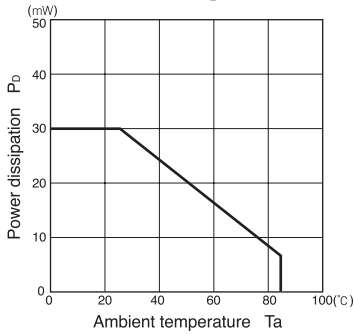
\*2. Color temp. =2856K standard Tungsten lamp



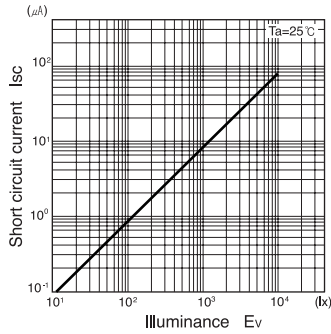
**PIN Photodiode**

**HPI - 147A66**

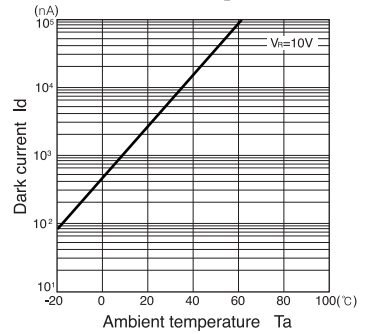
**Power dissipation Vs. Ambient temperature**



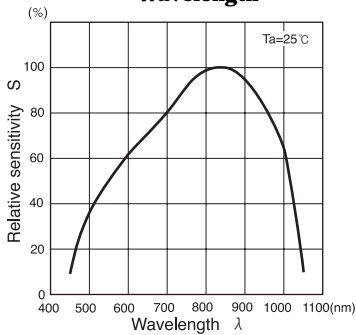
**Short circuit current Vs. Illuminance**



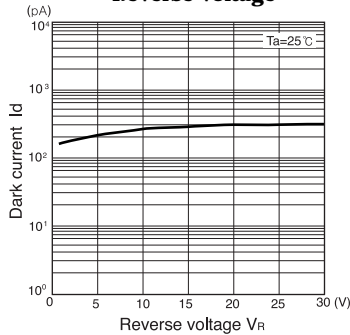
**Dark current Vs. Ambient temperature**



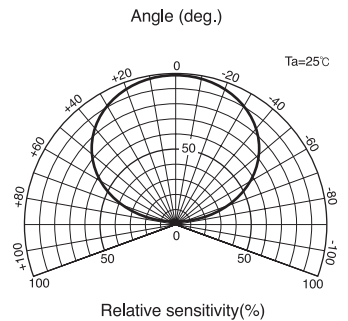
**Relative sensitivity Vs. Wavelength**



**Dark current Vs. Reverse voltage**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

