

HPI - 147A66

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

FEATURES

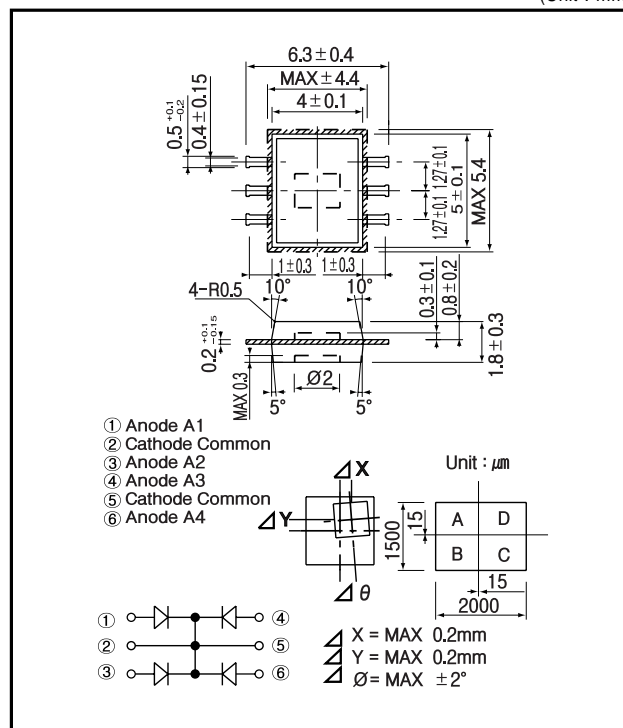
- Four segmented photodiodes/Flat plastic package
- High speed response

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_D	30	mW
Operating temp.	$T_{opr.}$	- 25~ +85	
Storage temp.	$T_{stg.}$	- 40~ +100	
Soldering temp. *1	$T_{sol.}$	260	

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

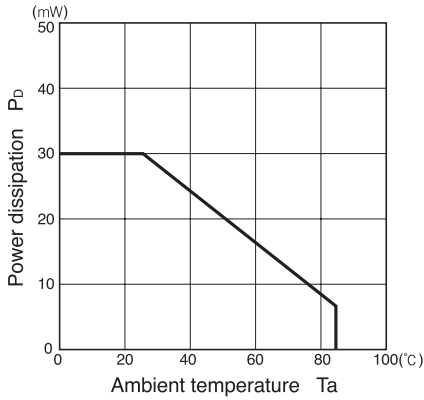
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	I_L	$V_R=10V, E_i=1000lx^{-2}$	7.0			μA
Sensitivity	S	$V_R=10V, p=680nm$	0.43	0.48		A/W
Dark current	I_d	$V_R=10V$			10	nA
Capacitance	C_t	$V_R=10V, f=1MHz$		5.0		pF
Spectral sensitivity				450~1050		nm
Peak wavelength	p			800		nm
Half angle	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

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

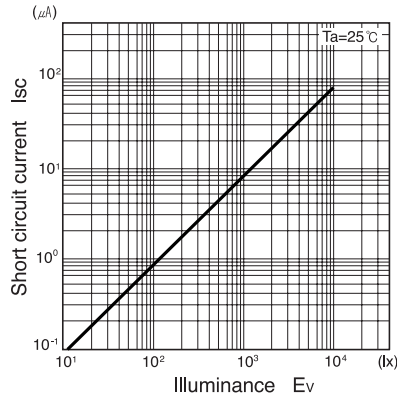
PIN Photodiode

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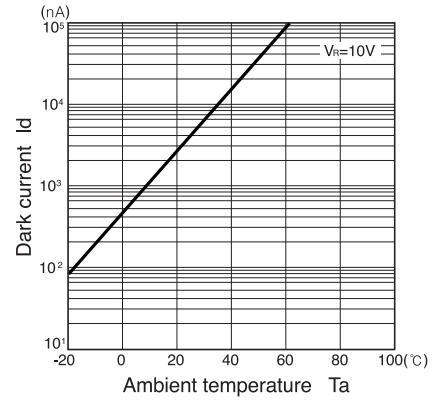
Power dissipation Vs. Ambient temperature



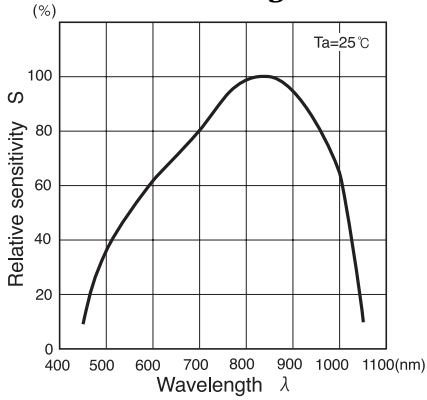
Short circuit current Vs. Illuminance



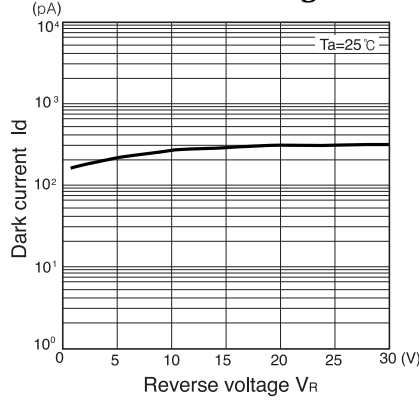
Dark current Vs. Ambient temperature



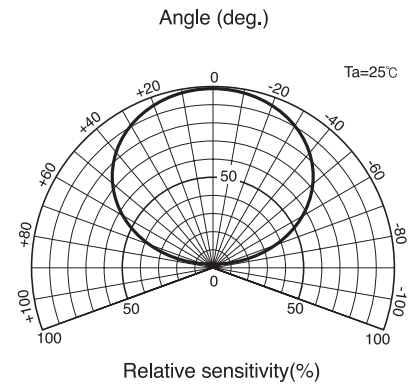
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

