

HPI - 146A64S

The HPI - 146A64S is a silicon PIN photodiode has two active areas (photodiodes) integrated in one chip.

FEATURES

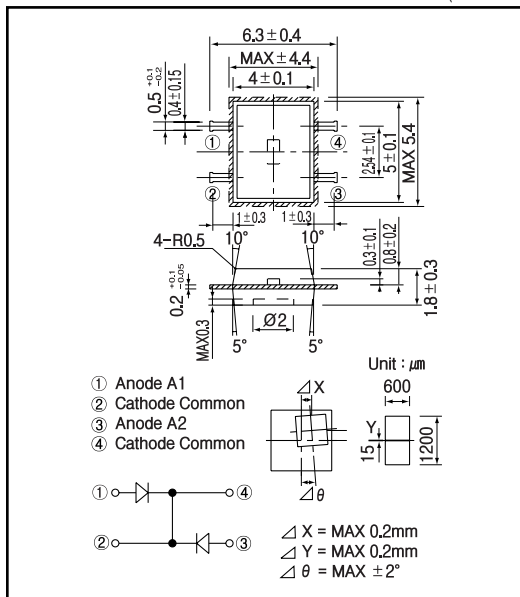
- Two segmented photodiodes/Flat plastic package
- High speed response

APPLICATIONS

- Auto focus

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 2mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

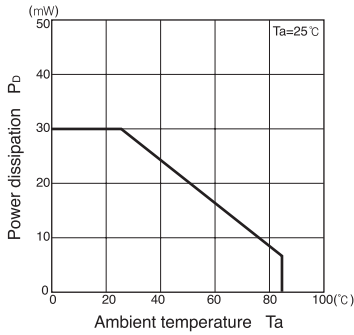
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	I_L	$V_R=10V, E=1000lx^{-2}$	3.0			μA
Sensitivity	S	$V_R=10V, p=680nm$	0.43	0.48		A/W
Dark current	I_d	$V_R=10V$			10	nA
Capacitance	C_t	$V_R=10V, f=1MHz$		2.0		pF
Spectral sensitivity				450 1050		nm
Peak wavelength	p			800		nm
Half angle				± 65		deg.
Rise time	t_r	$V_R=10V, R=1k, p=780$		10		ns
Fall time	t_f	$p=800nm$		10		ns

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

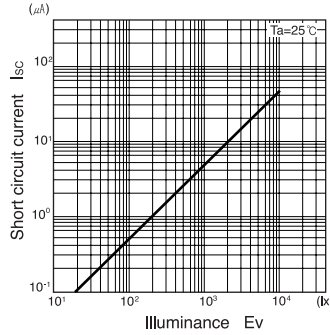
PIN Photodiode

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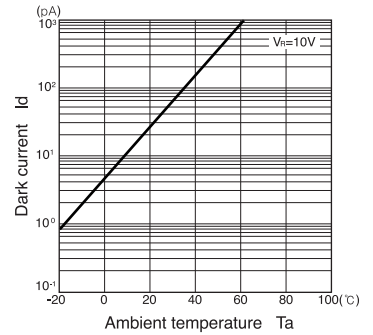
Power dissipation Vs. Ambient temperature



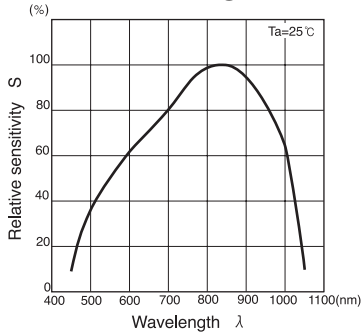
Short circuit current Isc vs. Illuminance Ev



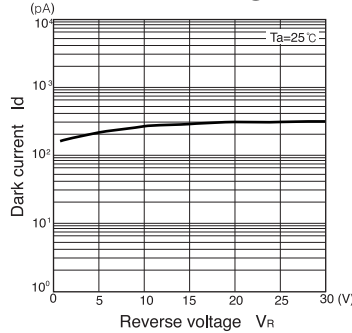
Dark current Id vs. Ambient temperature Ta



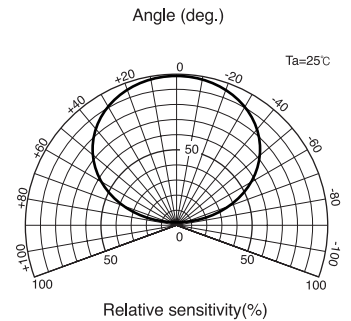
Relative sensitivity S vs. Wavelength λ



Dark current Id vs. Reverse voltage Vr



Radiant Pattern



Capacitance between terminals Ct vs. Reverse voltage Vr

