

HPI - 3663

HPI - 3663 is silicon PIN photodiodes for detecting laser beam. HPI - 3663 has active areas for tracking on both sides of four segmented photodiodes.

FEATURES

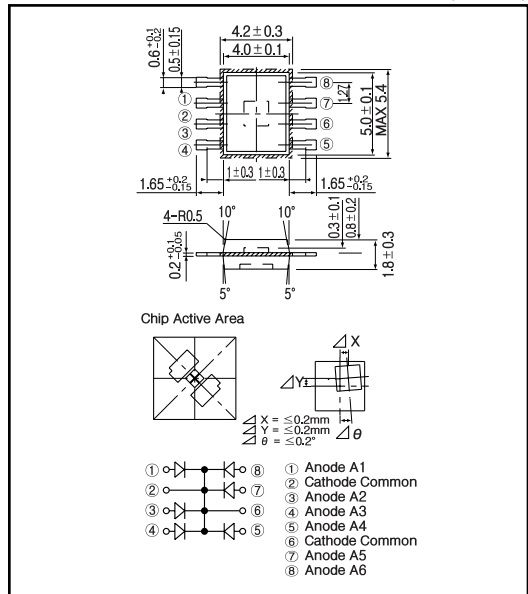
- Six segmented photodiodes
- Active area rotated at 45 deg.
- High speed response

APPLICATIONS

- Optical pick up

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.	Topr.	- 25 ~ + 85	
Storage temp.	Tstg.	- 40 ~ + 100	

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

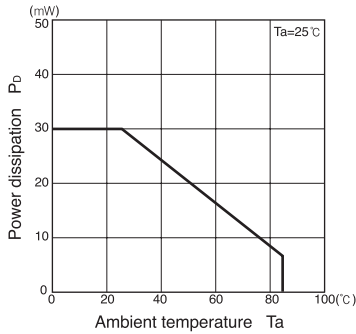
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	I_L	$V_R = 10V, E = 1,000 \text{ lx}^1$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$		μA
Sensitivity	S	$V_R = 10V$	0.4	0.5		A/W
Dark current	I_d	$V_R = 10V$		$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	nA
Capacitance	C_t	$V_R = 10V, f = 1\text{MHz}$		$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	pF
Spectral sensitivity	λ			450 ~ 1,050		nm
Peak wavelength	λ_p			900		nm
Half angle	$\Delta \theta$			± 65		deg.

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

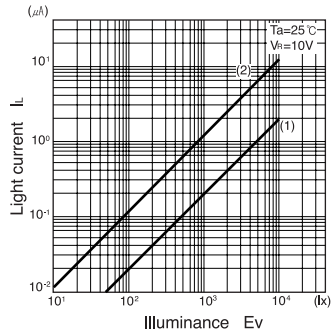
Laser detectors

HPI - 3663

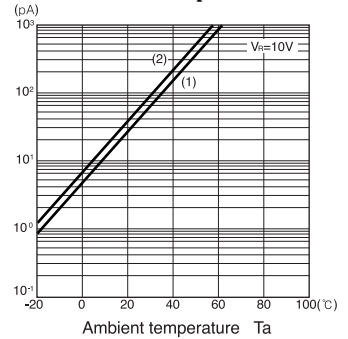
Power dissipation Vs. Ambient temperature



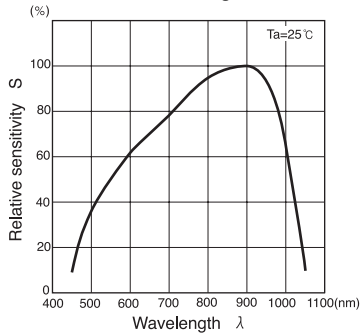
Light current Vs. Illuminance



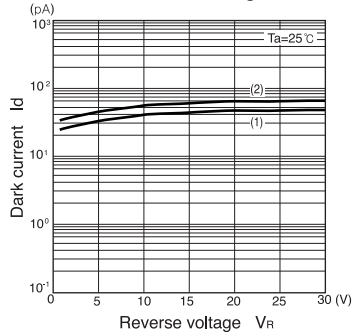
Dark current Vs. Ambient temperature



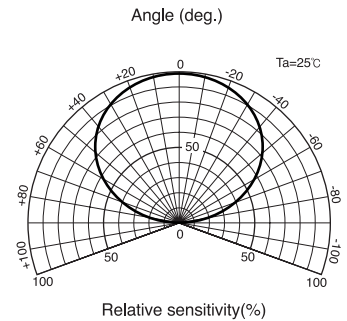
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

