

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

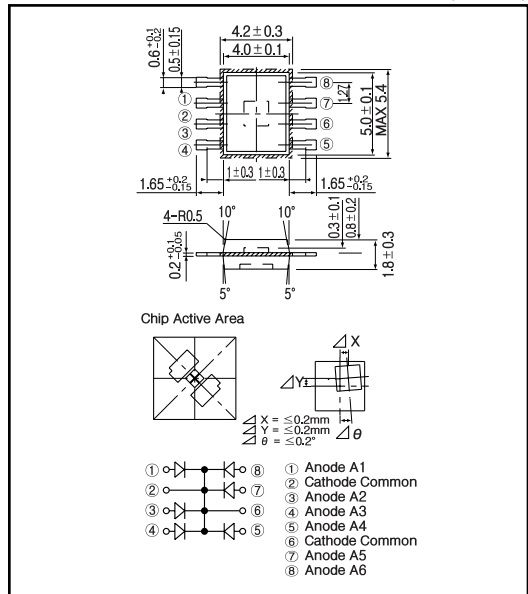
- Six segmented photodiodes
- Active area rotated at 45 deg.
- High speed response

APPLICATIONS

- Optical pick up

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Power dissipation	P_o	30	mW
Operating temp.	Topr.	- 25 ~ + 85	
Storage temp.	Tstg.	- 40 ~ + 100	

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

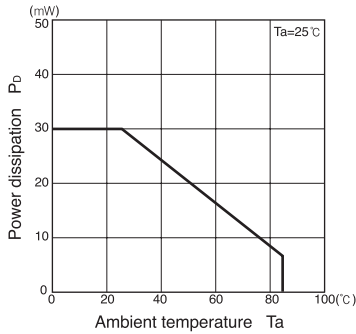
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	I_L	$V_R = 10V, E = 1,000 \text{ lx}^1$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$	$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$		μA
Sensitivity	S	$V_R = 10V$	0.4	0.5		A/W
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	$V_R = 10V, f = 1\text{MHz}$		$\begin{pmatrix} 1.5 \\ 2 \end{pmatrix} \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$		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

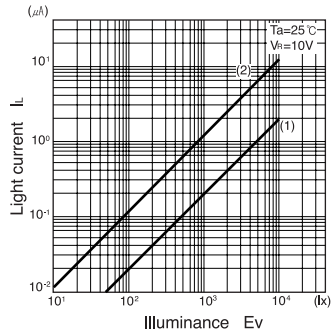
Laser detectors

HPI - 3663

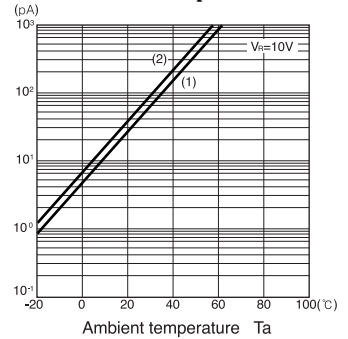
**Power dissipation Vs.
Ambient temperature**



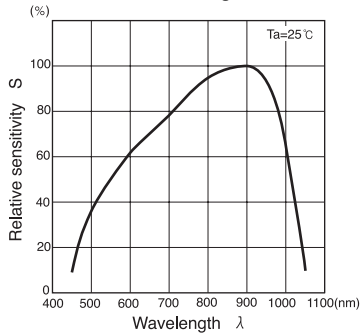
**Light current Vs.
Illuminance**



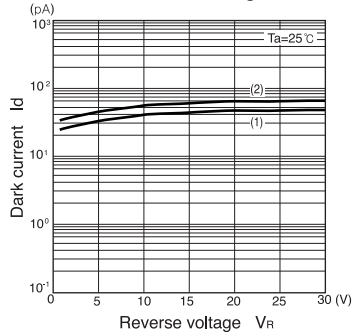
**Dark current Vs.
Ambient temperature**



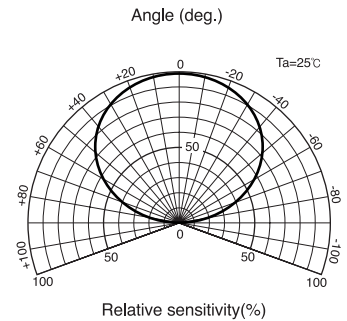
**Relative sensitivity Vs.
Wavelength**



**Dark current Vs.
Reverse voltage**



Radiant Pattern



**Capacitance between terminals Vs.
Reverse voltage**

