

# HPI - 6FH

The HPI - 6FH is a high - output, high - speed silicon photodiode mounted in a side - viewing plastic package . This photodiode is both compact and easy to mount.

**FEATURES**

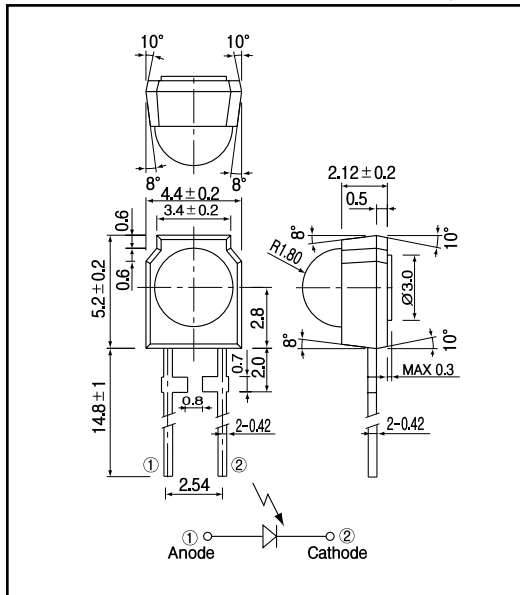
- Plastic mold package
- High speed response

**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.	$T_{opr.}$	- 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 )

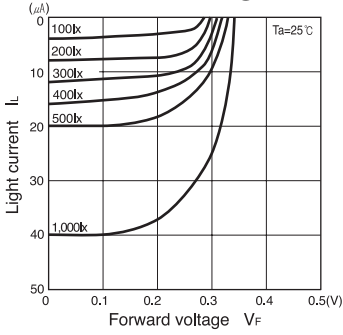
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Light current	$I_L$	$V_R=10V, E=1000lx^2$	25			$\mu A$
Sensitivity	$S$	$V_R=10V, p=780nm$	0.43	0.48		A/W
Dark current	$I_d$	$V_R=10V$			5.0	nA
Capacitance	$C_t$	$V_R=10V, f=1MHz$		3.0		pF
Spectral sensitivity				450-1050		nm
Peak wavelength	$p$			800		nm
Half angle				$\pm 40$		deg.
Rise time	$t_r$	$V_R=10V, R=1k$		10		ns
Fall time	$t_f$	$p=780 800nm$		10		ns

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

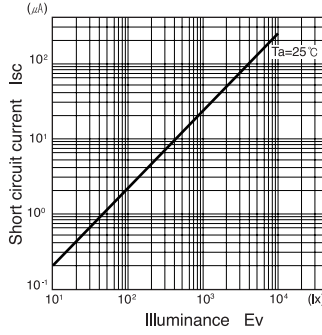
**PIN Photodiode**

**HPI - 6FH**

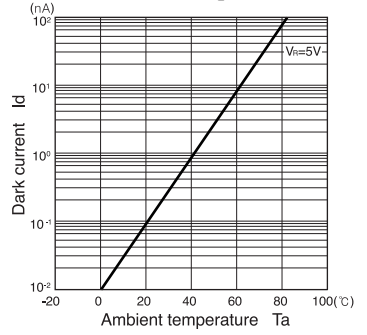
**Light current Vs. Forward voltage**



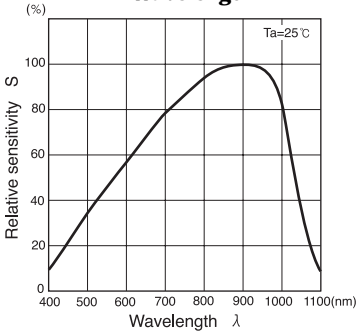
**Short circuit current I\_sc Vs. Illuminance**



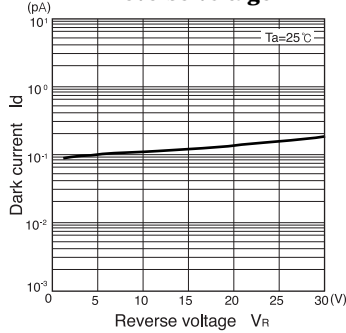
**Dark current I\_d Vs. Ambient temperature T\_a**



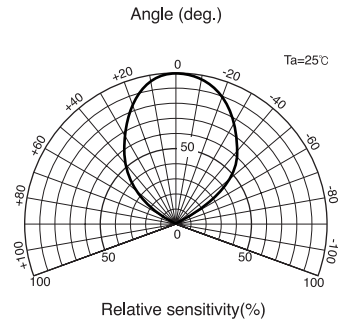
**Relative sensitivity Vs. Wavelength**



**Dark current I\_d Vs. Reverse voltage V\_R**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

