

# HPI - 23G

The HPI - 23G is a high - speed, high - output silicon PIN photodiode mounted in a clear sidelooking package. The photodiode is small size, low profile and easy mounting.

**FEATURES**

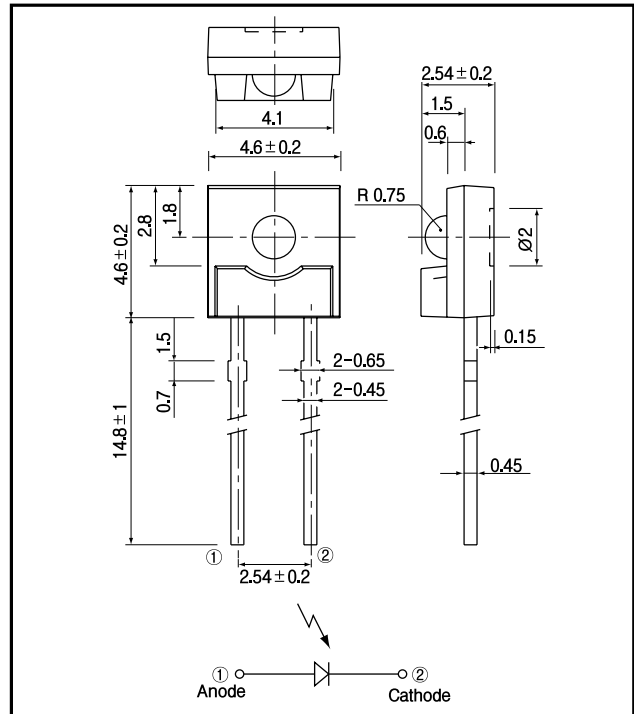
- High - output power
- High - speed response
- Wide angular response
- Low - cost
- Sidelooking plastic package

**APPLICATIONS**

- Fiber optic communications
- Optical switches
- Photocoupler

**DIMENSIONS**

(Unit : mm)



**MAXIMUM RATINGS**

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	40	V
Operating temp.	$T_{opr.}$	- 20 ~ + 85	
Storage temp.	$T_{stg.}$	- 30 ~ + 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 )

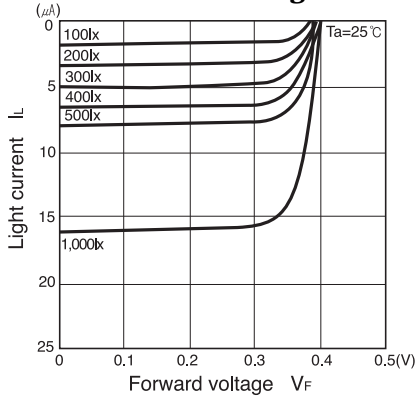
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	$V_{oc}$	$E_v = 1,000lx^{-2}$		0.4		V
Short circuit current	$I_{sc}$		10	16		$\mu A$
Sensitivity	S			0.4		A/W
Dark current	$I_d$	$V_R = 10V$			10	nA
Curve factor	C.F.		0.55			-
Capacitance	$C_t$	$V = 0V, f = 1MHz$		10		pF
Temperature coefficient of $V_{oc}$	t			- 2.2		mV/
Temperature coefficient of $I_{sc}$	t			0.18		%/
Spectral sensitivity				450 ~ 1,050		nm
Peak wavelength	p			920		nm
Half angle				$\pm 30$		deg.

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

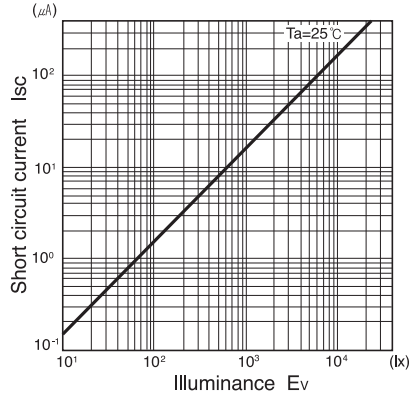
**PIN Photodiode**

**HPI - 23G**

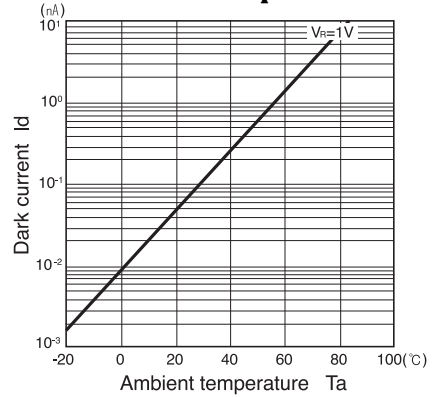
**Light current Vs. Forward voltage**



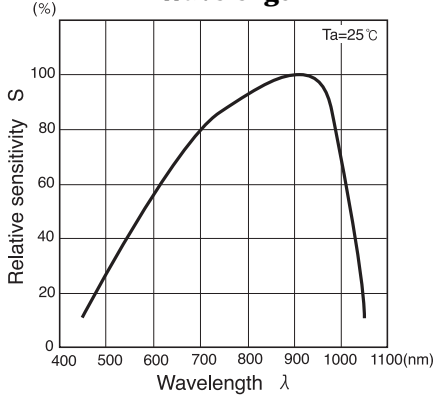
**Short circuit current Vs. Illuminance**



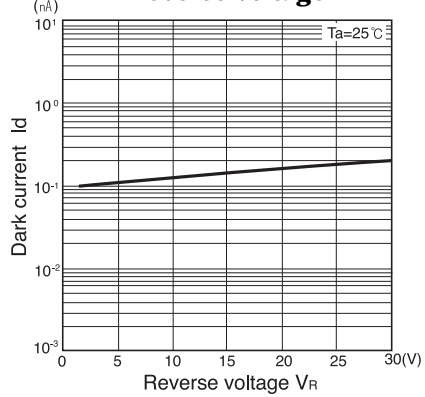
**Dark current Vs. Ambient temperature**



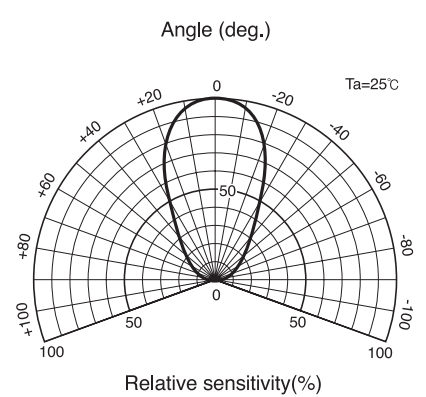
**Relative sensitivity Vs. Wavelength**



**Dark current Vs. Reverse voltage**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

