

HPI - 307

The HPI - 307 is a high - output, high - speed silicon PIN photodiode mounted in a clear sidelooking package.

FEATURES

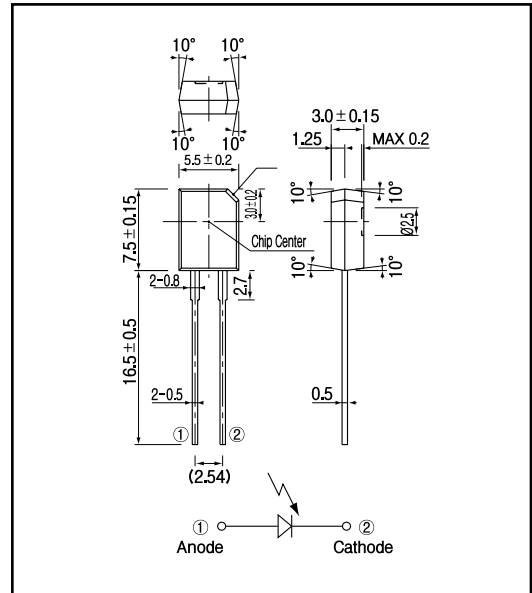
- High - output power
- High - speed response
- Wide angular response
- Low - cost
- Sidelooking plastic package

APPLICATIONS

- Remote control sensors
- Optical switches
- Photocoupler

DIMENSIONS

(Unit : mm)

**MAXIMUM RATINGS**

(Ta=25 °C)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	35	V
Operating temp.	$T_{opr.}$	- 30 ~ + 70	
Storage temp.	$T_{stg.}$	- 40 ~ + 80	
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 °C)

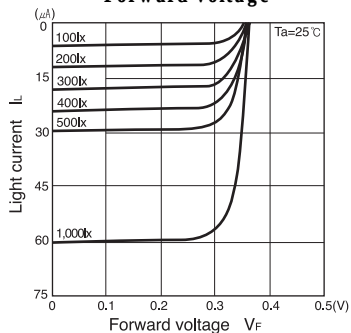
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{oc}	$E_v = 1,000 \text{ lx}^2$		0.38		V
Short circuit current	I_{sc}			60		μA
Dark current	I_d	$V_R = 10 \text{ V}$	-	-	30	nA
Curve factor	C.F.		0.55			-
Capacitance	C_t	$V = 0 \text{ V}, f = 1 \text{ MHz}$		94		pF
Temperature coefficient of V_{oc}	α_t			- 2.2		mV/°C
Temperature coefficient of I_{sc}	β_t			0.18		%/°C
Spectral sensitivity	λ			450 ~ 1,050		nm
Peak wavelength	λ_p			920		nm
Half angle	$\Delta \theta$			± 70		deg.

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

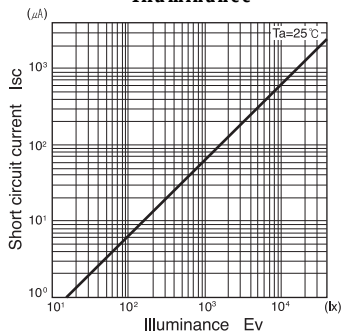
PIN Photodiode

HPI - 307

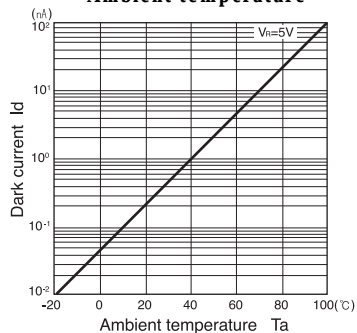
**Light current Vs.
Forward voltage**



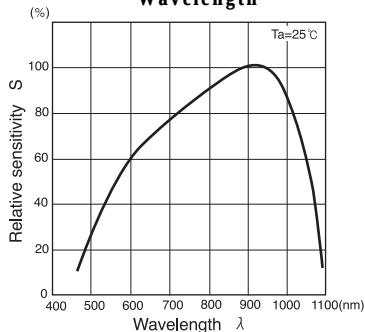
**Short circuit current Vs.
Illuminance**



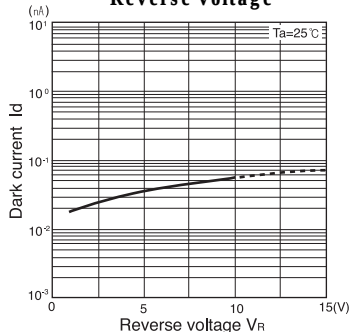
**Dark current Vs.
Ambient temperature**



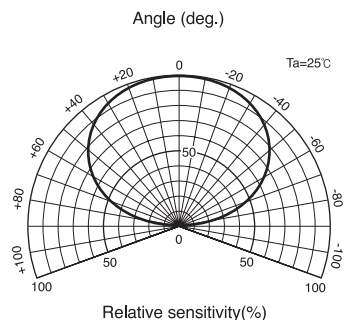
**Relative sensitivity Vs.
Wavelength**



**Dark current Vs.
Reverse voltage**



Radiant Pattern



**Capacitance between terminals Vs.
Reverse voltage**

