

HPI - 307

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

FEATURES

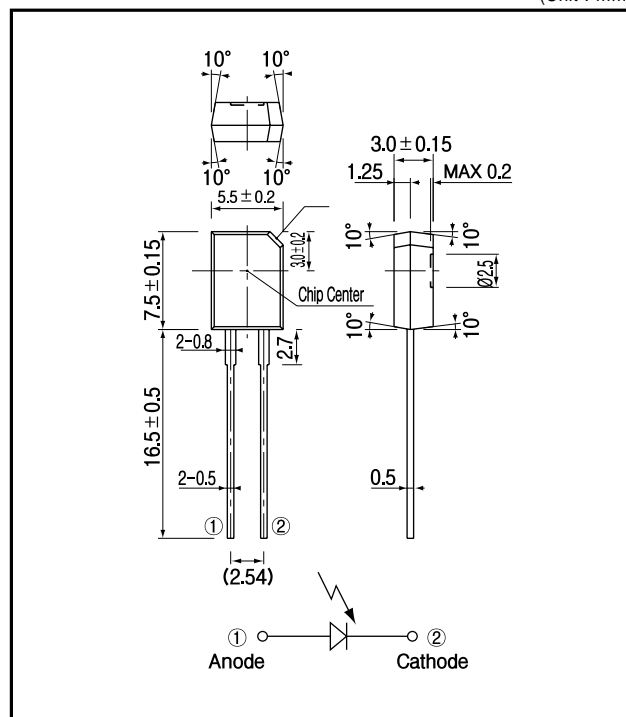
- High - output power
- High - speed response
- Wide angular response
- Low - cost
- Sidelooking plastic package

APPLICATIONS

- Remote control sensors
- Optical switches
- Photocoupler

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	35	V
Operating temp.	Topr.	- 30 ~ + 70	
Storage temp.	Tstg.	- 40 ~ + 80	
Soldering temp. *1	Tsol.	260	

*1. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

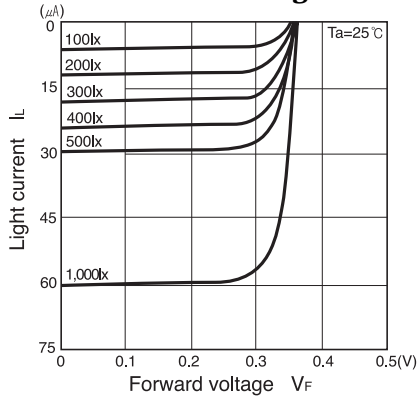
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{oc}	$E_v = 1,000lx^2$		0.38		V
Short circuit current	I_{sc}			60		μA
Dark current	I_d	$V_R = 10V$	-	-	30	nA
Curve factor	C.F.		0.55			-
Capacitance	C_t	$V = 0V, f = 1MHz$		94		pF
Temperature coefficient of V_{oc}	t			- 2.2		mV/
Temperature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

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

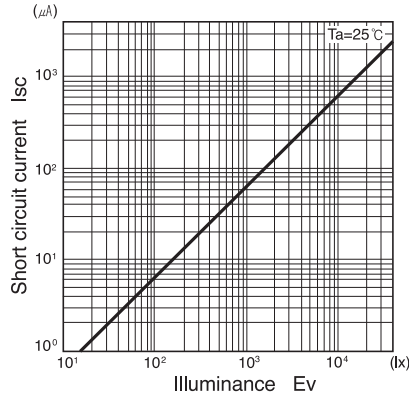
PIN Photodiode

HPI - 307

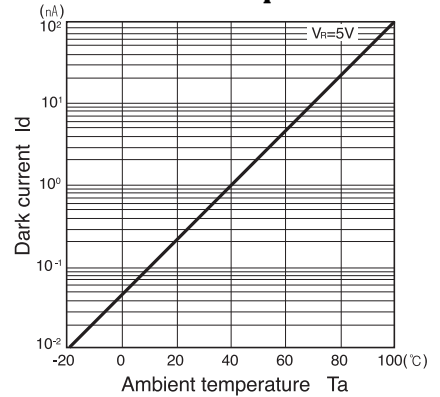
Light current Vs. Forward voltage



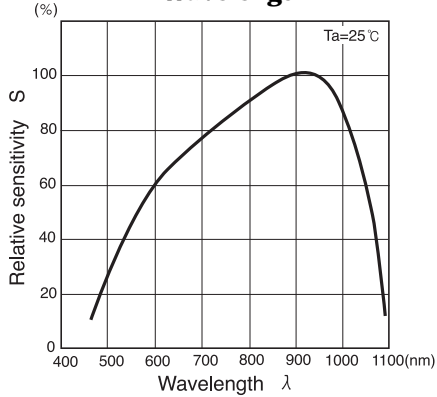
Short circuit current Vs. Illuminance



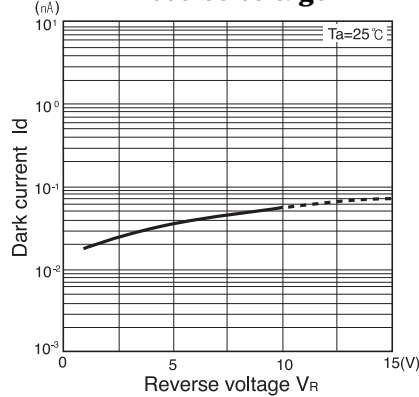
Dark current Vs. Ambient temperature



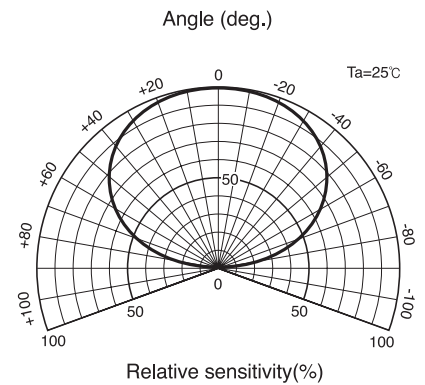
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

