

HPI - 1K1 · HPI - 1K3

The HPI - 1K1 and HPI - 1K3 are PIN photodiodes for fiber optic receivers, mounted in a durable, hermetically sealed TO - 18 metal can package, which offer high - speed response and high output. HPI - 1K1 cathode connected to metal case. Each HPI - 1K3 lead pin is isolated from metal case.

FEATURES

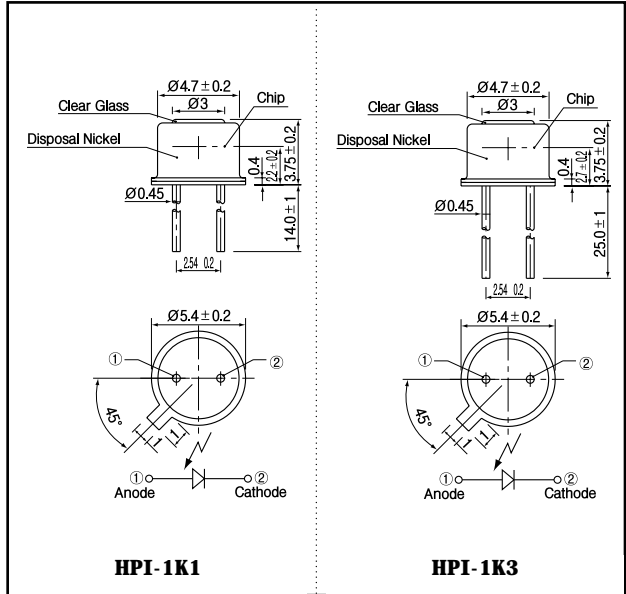
- High - output power
- High - speed response
- Durable
- High reliability in demanding environments
- Narrow angular response

APPLICATIONS

- Fiber optic communications
- Optical switches

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating		Unit
		HPI - 1K1	HPI - 1K3	
Reverse voltage	V _R	40	40	V
Power dissipation	P ₀	100	100	mW
Operating temp.	T _{opr.}	- 30 ~ + 100	- 25 ~ + 100	
Storage temp.	T _{stg.}	- 40 ~ + 110	- 40 ~ + 110	
Soldering temp. *1	T _{sol.}	260	260	

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

(Ta=25)

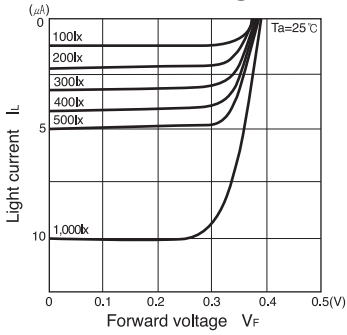
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V _{oc}	E _v = 1,000lx ²		0.38		V
Short circuit current	I _{sc}			10		μA
Sensitivity	S			0.4		A/W
Dark current	I _d	V _R = 1V			10	nA
Curve factor	C.F.		0.55			-
Capacitance	C _t	V = 0V, f = 1MHz		10		pF
Temperature coefficient of V _{oc}	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				± 50		deg.

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

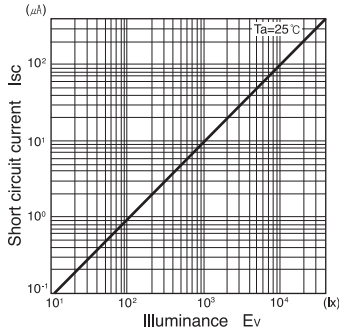
PIN Photodiode

HPI - 1K1 · HPI - 1K3

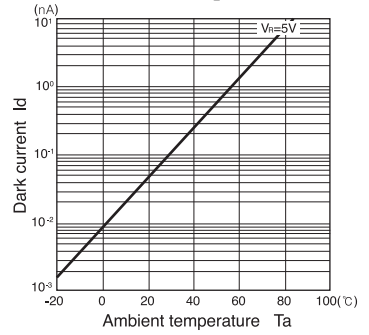
Light current Vs. Forward voltage



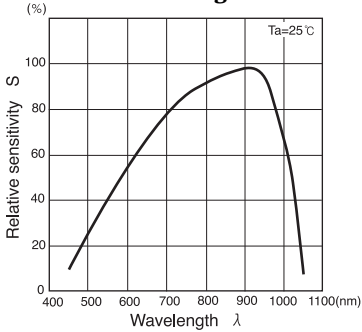
Short circuit current I_sc Vs. Illuminance E_v



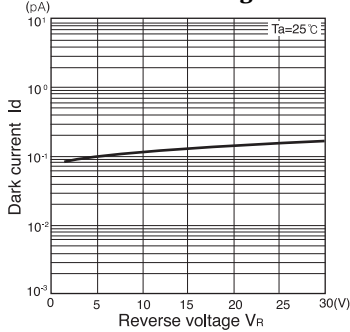
Dark current I_d Vs. Ambient temperature T_a



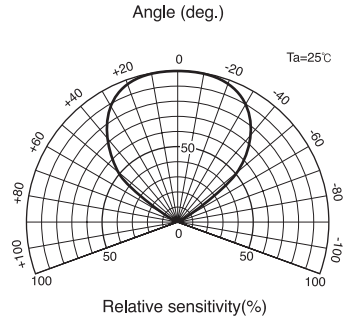
Relative sensitivity S Vs. Wavelength λ



Dark current I_d Vs. Reverse voltage V_R



Radiant Pattern



Capacitance between terminals C_t Vs. Reverse voltage V_R

