

PIN Photodiode

KODENSHI

HPI - 1KL5

The HPI - 1KL5, a silicon PIN photodiode mounted in durable, hermetically sealed TO - 18 metal can package, provides years of reliable performance even under demanding conditions such as use outdoors.

FEATURES

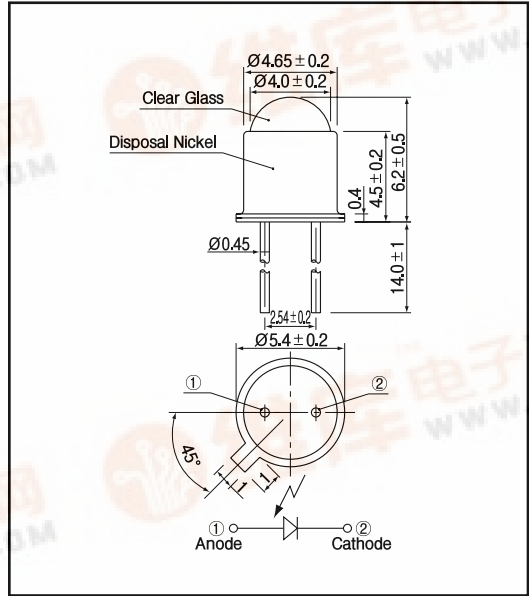
- TO - 18 can type with glass lens
- High speed response
- High reliability

APPLICATIONS

- Optical transmissions
- Optical switches
- Precise optical equipment

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V _R	40	V
Power dissipation	P _o	100	mW
Operating temp.	Topr.	- 25 +100	
Storage temp.	Tstg.	- 40 +110	
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		0.4		V
Short circuit current	I _{sc}	E _v = 1,000lx ²	65	85		µA
Curve factor	C.F.		0.55			—
Dark current	I _d	V _R = 5V			0.1	µA
Capacitance	C _t	V = 0V, f = 1MHz		10		pF
Temperature coefficient of Voc	t			- 2.2		mV/
Temperature coefficient of I _{sc}	t			0.18		%/
Spectral sensitivity				450 1050		nm
Peak wavelength	p			920		nm
Half angle		I _F = 20mA		± 6		deg.

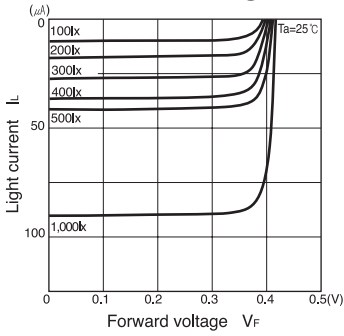
*2. Color temp. = 2856K standard Tungsten lamp



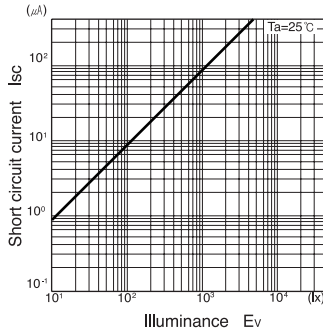
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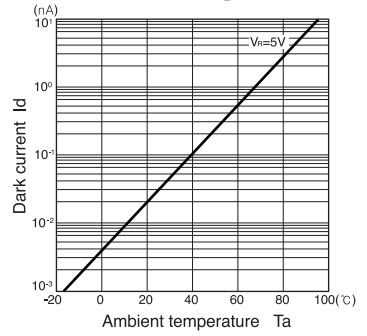
Light current Vs. Forward voltage



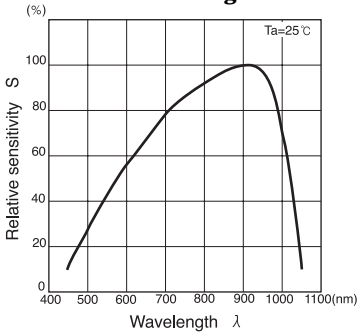
Short circuit current Vs. Illuminance



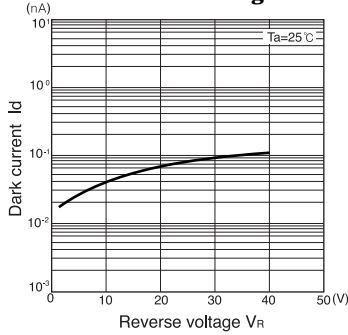
Dark current Vs. Ambient temperature



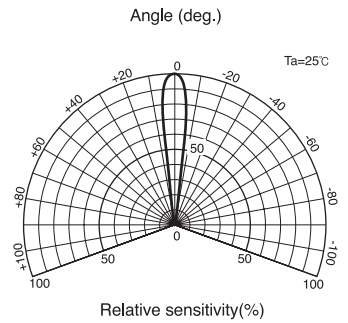
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

