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

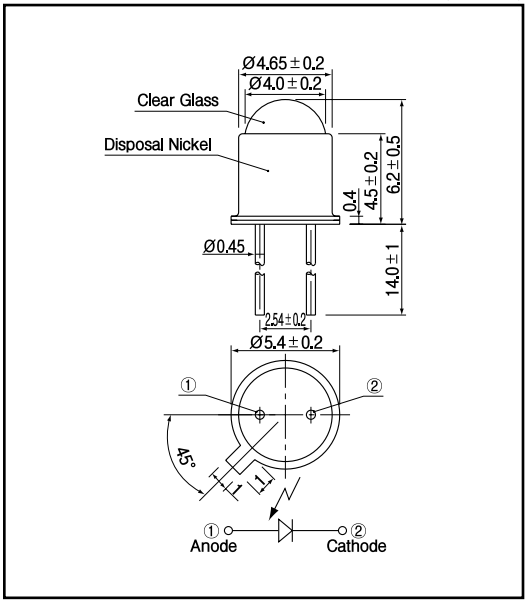
- TO - 18 can type with glass lens
- High speed response
- High reliability

APPLICATIONS

- Optical transmissions
- Optical switches
- Precise optical eqipment

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25℃)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Power dissipation	P_D	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℃)

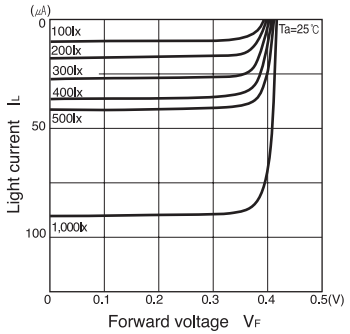
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{OC}	E_V=1,000lx*2		0.4		V
Short circuit current	I_{SC}	E_V=1,000lx*2	65	85		μA
Curve factor	C.F.		0.55			—
Dark current	Id	V_R=5V			0.1	μA
Capacitance	Ct	V=0V,f=1MHz		10		pF
Temperature coefficient of Voc	αt			−2.2		mV/℃
Temperature coefficient of Isc	βt			0.18		%/℃
Spectral sensitivity	λ		450 1050			nm
Peak wavelength	λp			920		nm
Half angle	Δθ	I_F=20mA		±6		deg.

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

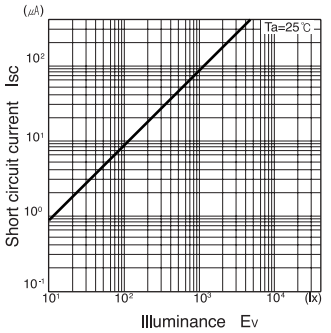
PIN Photodiode

HPI - 1KL5

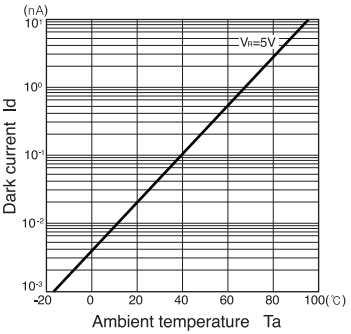
Light current Vs. Forward voltage



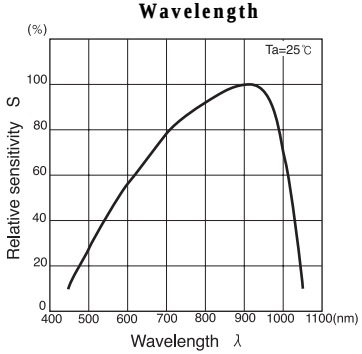
Short circuit current Vs. Illuminance



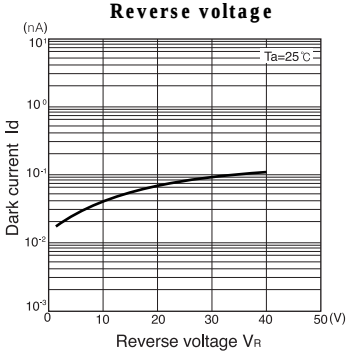
Dark current Vs. Ambient temperature



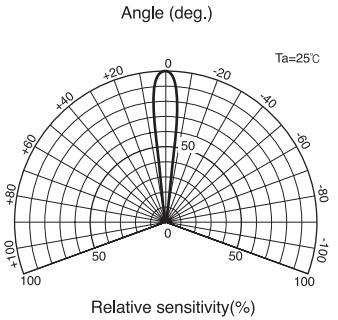
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

