

# HPI - 210

The HPI - 210, 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**

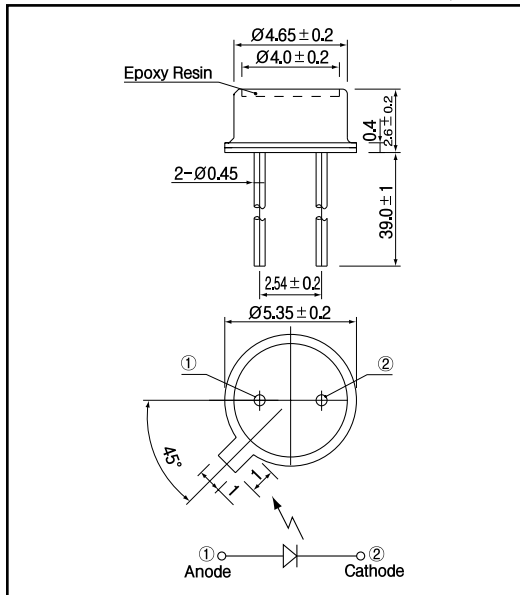
- High speed response
- Wide angular response ±65deg.
- Low profile h=2.6mm

**APPLICATIONS**

- Optical fibers
- Optical Switches

**DIMENSIONS**

(Unit : mm)



**MAXIMUM RATINGS**

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	V <sub>r</sub>	30	V
Operating temp.	Topr.	- 20 + 80	
Storage temp.	Tstg.	- 20 + 80	
Soldering temp. *1	Tsol.	240	

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

**ELECTRO-OPTICAL CHARACTERISTICS**

(Ta=25 )

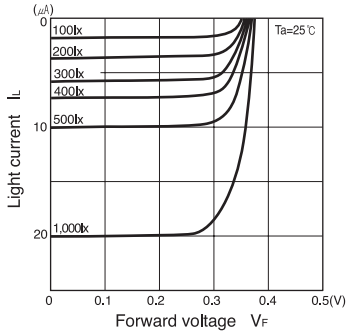
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V <sub>oc</sub>	E <sub>v</sub> = 1,000lx <sup>-2</sup>		0.35		V
Short circuit current	I <sub>sc</sub>	E <sub>v</sub> = 1,000lx <sup>-2</sup>		20		μA
Curve factor	C.F.			—		—
Dark current	I <sub>d</sub>	V <sub>r</sub> = 20V			10	nA
Capacitance	C <sub>t</sub>	V <sub>r</sub> = 3V, f = 1MHz		16		pF
Temperature coefficient of Voc	t			—		mV/
Temperature coefficient of I <sub>sc</sub>	t			—		%/
Spectral sensitivity				450 1050		nm
Peak wavelength	p			900		nm
Half angle				± 65		deg.

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

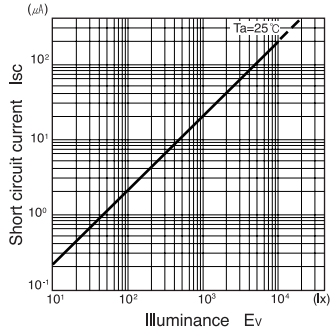
**PIN Photodiode**

**HPI - 210**

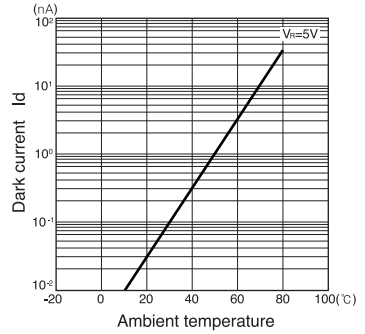
**Light current Vs. Forward voltage**



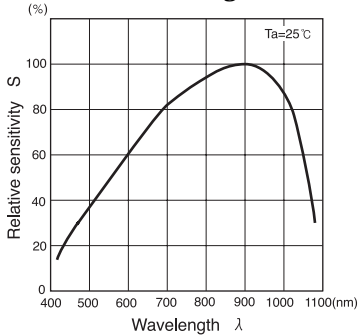
**Short circuit current I\_sc Vs. Illuminance E\_v**



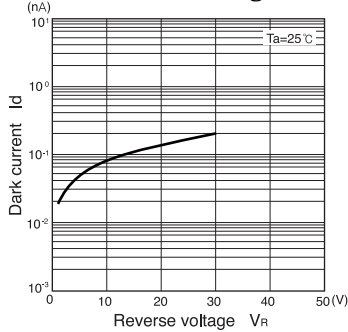
**Dark current I\_d Vs. Ambient temperature**



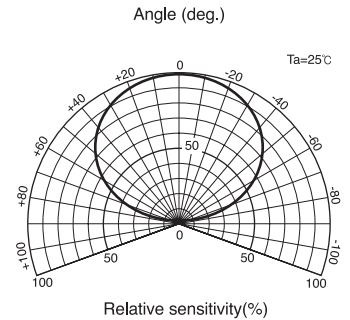
**Relative sensitivity Vs. Wavelength**



**Dark current I\_d Vs. Reverse voltage V\_R**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

