

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

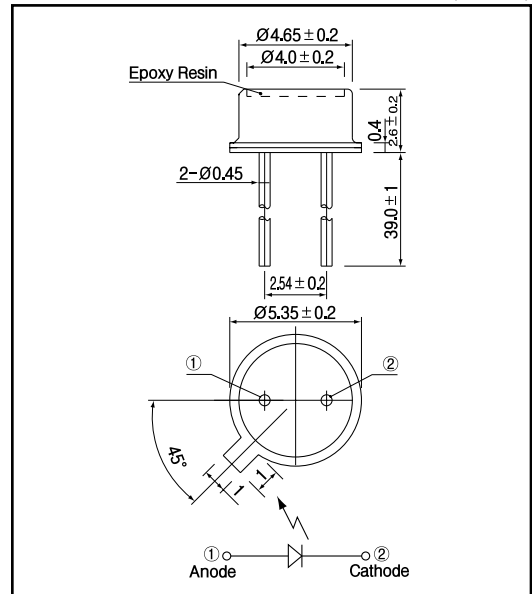
- High speed response
- Wide angular response $\Delta \theta \approx 65^\circ$.
- Low profile $h=2.6\text{mm}$

APPLICATIONS

- Optical fibers
- Optical Switches

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 °C)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Operating temp.	$T_{opr.}$	- 20 + 80	
Storage temp.	$T_{stg.}$	- 20 + 80	
Soldering temp. ^{*1}	$T_{sol.}$	240	

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25 °C)

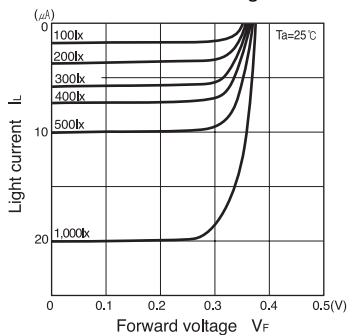
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{oc}	$E_v = 1,000 \text{ lx}^{-1/2}$		0.35		V
Short circuit current	I_{sc}	$E_v = 1,000 \text{ lx}^{-1/2}$		20		μA
Curve factor	C.F.			—		—
Dark current	I_d	$V_R = 20\text{V}$			10	nA
Capacitance	Ct	$V_R = 3\text{V}, f = 1\text{MHz}$		16		pF
Temperature coefficient of V_{oc}	α_t			—		mV/°C
Temperature coefficient of I_{sc}	β_t			—		%/°C
Spectral sensitivity	λ			450 1050		nm
Peak wavelength	λ_p			900		nm
Half angle	$\Delta \theta$			± 65		deg.

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

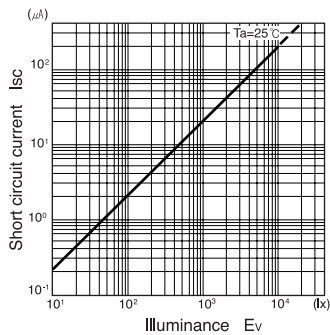
PIN Photodiode

HPI - 210

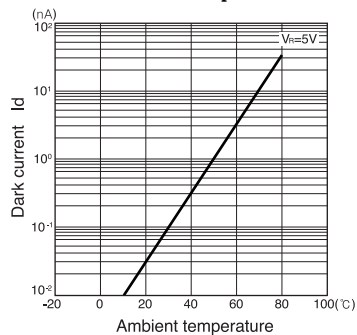
**Light current Vs.
Forward voltage**



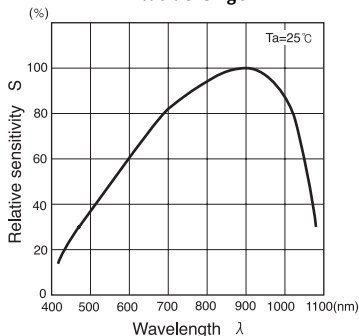
**Short circuit current Vs.
Illuminance**



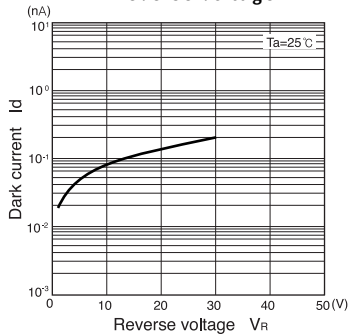
**Dark current Vs.
Ambient temperature**



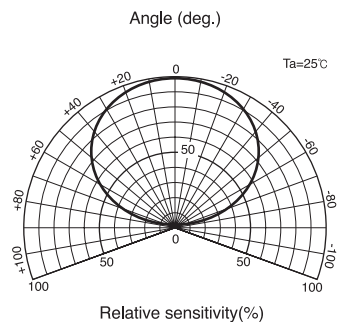
**Relative sensitivity Vs.
Wavelength**



**Dark current Vs.
Reverse voltage**



Radiant Pattern



**Capacitance between terminals Vs.
Reverse voltage**

