

Photo diodes

KODENSHI

HP - 202

The HP - 202 is a high - output, high - speed silicon photodiode, mounted in durable hermetically sealed TO - 5 metal can package, which provides years of reliable performance even under demanding conditions such as use outdoors.

FEATURES

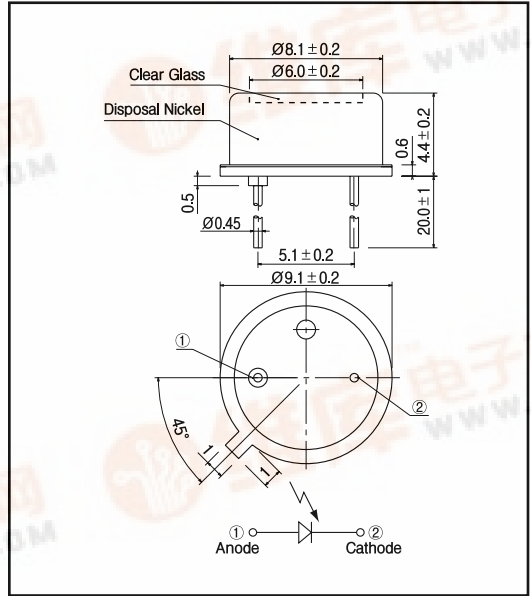
- High - output power
- High - speed response
- Durable
- High reliability in demanding environments

APPLICATIONS

- Optical detectors
- Optical switches
- Smoke detectors

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 )

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	10	V
Operating temp.	$T_{opr.}$	- 25 ~ +100	
Storage temp.	$T_{stg.}$	- 30 ~ +100	
Soldering temp. *1	$T_{sol.}$	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	$V_{oc}$	$E_v = 1,000lx^{-2}$		0.3		V
Short circuit current	$I_{sc}$			65		$\mu A$
Dark current	$I_d$	$V_R = 10V$			0.1	$\mu A$
Curve factor	C.F.		0.55			-
Capacitance	$C_t$	$V = 0V, f = 1MHz$		155		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	$\lambda_p$			900		nm
Half angle				$\pm 55$		deg.

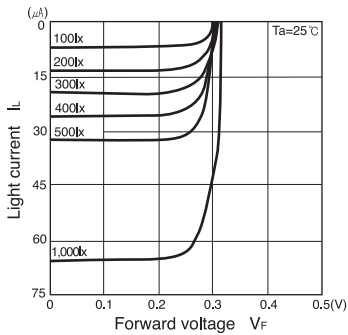
\*2. Color temp. =2856K standard Tungsten lamp



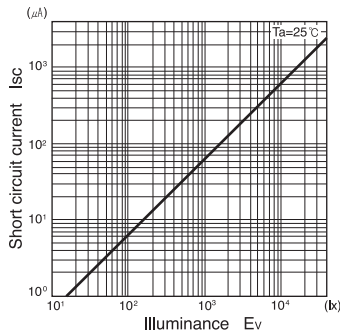
**Photo diodes**

**HP - 202**

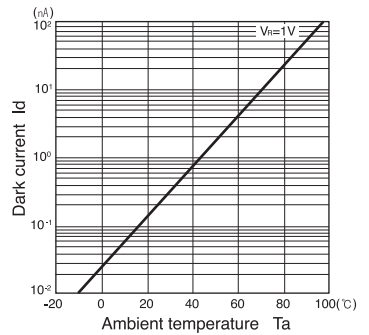
**Light current Vs. Forward voltage**



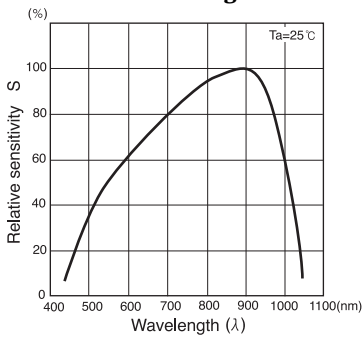
**Short circuit current Vs. Illuminance**



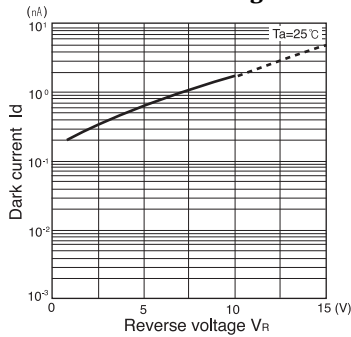
**Dark current Vs. Ambient temperature**



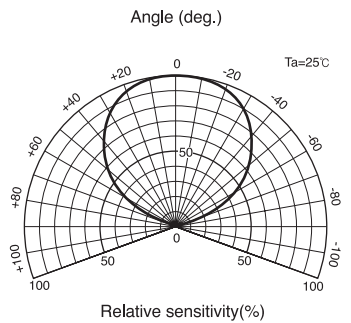
**Relative sensitivity Vs. Wavelength**



**Dark current Vs. Reverse voltage**



**Radiant Pattern**



**Capacitance between terminals Vs. Reverse voltage**

