

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

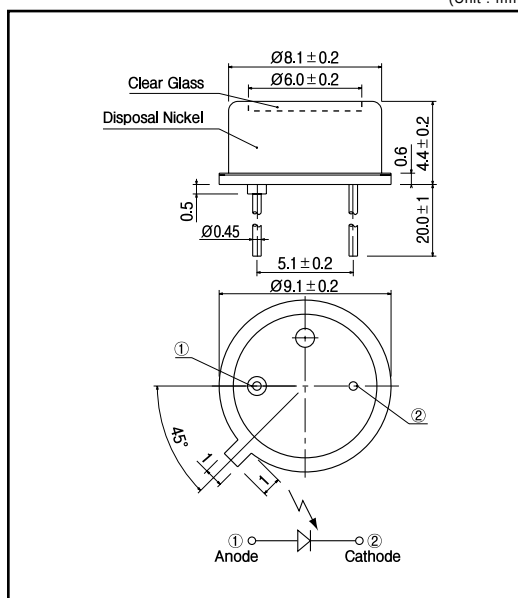
- High - output power
- High - speed response
- Durable
- High reliability in demanding environments

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 °)

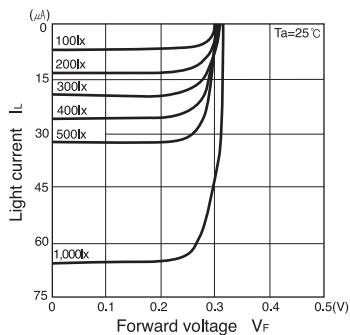
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{oc}	$E_v = 1,000 \text{ lx}^{-2}$		0.3		V
Short circuit current	I_{sc}			65		μA
Dark current	I_d	$V_R = 10\text{V}$			0.1	μA
Curve factor	C.F.		0.55			-
Capacitance	C_t	$V = 0\text{V}, f = 1\text{MHz}$		155		pF
Temperature coefficient of V_{oc}	α_t			- 2.2		mV/°C
Temperature coefficient of I_{sc}	β_t			0.18		%/°C
Spectral sensitivity	λ			450 ~ 1,050		nm
Peak wavelength	λ_p			900		nm
Half angle	$\Delta \theta$			± 55		deg.

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

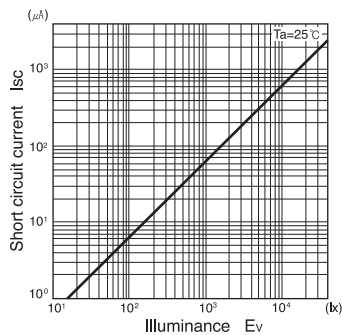
Photo diodes

HP - 202

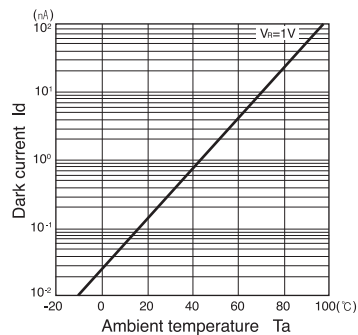
**Light current Vs.
Forward voltage**



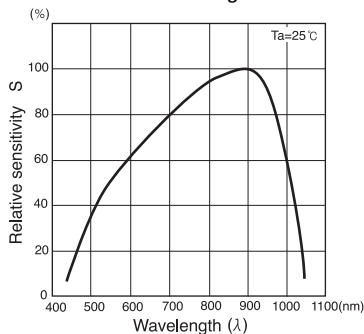
**Short circuit current Vs.
Illuminance**



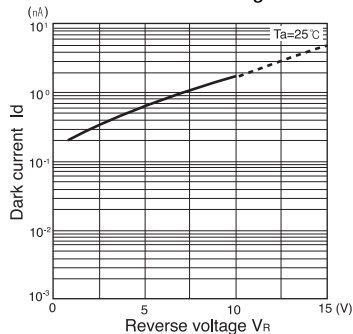
**Dark current Vs.
Ambient temperature**



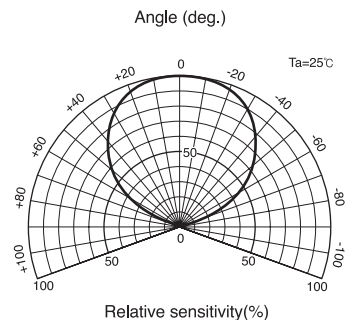
**Relative sensitivity Vs.
Wavelength**



**Dark current Vs.
Reverse voltage**



Radiant Pattern



**Capacitance between terminals Vs.
Reverse voltage**

