HPI - 2C · HPI - 2CR2

The HPI - 2C is a high - speed, high - output silicon PIN photodiode, mounted in a low profile ceramic package. The HPI - 2CR2 photodiode, with daylight filter, is available in the same package.

FEATURES

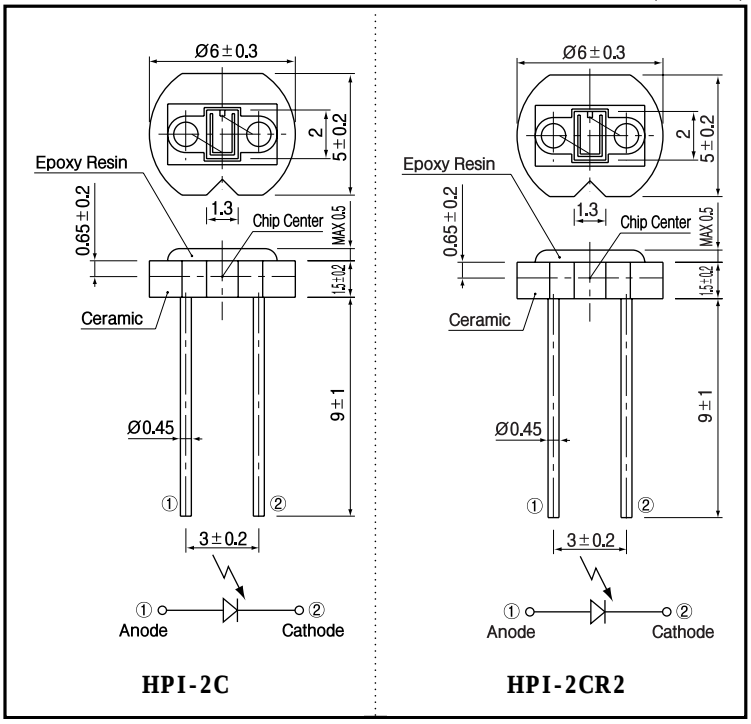
- High - output power
- High - speed response
- Low dark current
- Thin ceramic package (t=1.5mm)

APPLICATIONS

- Fiber optic communications
- Optical switches

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Power dissipation	P_D	100	mW
Operating temp.	Topr.	-20~+70	°C
Storage temp.	Tstg.	-40~+80	°C
Soldering temp. *1	Tsol.	260	°C

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

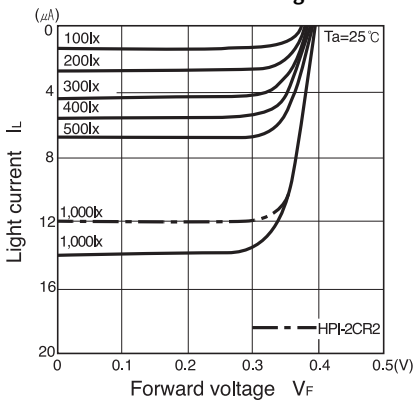
Item	Symbol	Conditions	HPI - 2C			HPI - 2CR2			Unit.
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Open circuit voltage	V_{OC}	E_V=1,000lx *2		0.38			0.3		V
Short circuit current	I_{SC}			14			12		μA
Sensitivity	S			0.4			0.4		A/W
Dark current	Id	V_R=5V			0.1			0.1	μA
Curve factor	C.F.		0.55			0.55			-
Capacitance	Ct	V=0V, f=1MHz		20			20		pF
Temperature coefficient of V_{OC}	αt			-2.2			-2.2		mV/°C
Temperature coefficient of I_{SC}	βt			0.18			0.18		%/°C
Spectral sensitivity	λ		450~1,050			700~1,050			nm
Peak wavelength	λp			920			940		nm
Half angle	Δθ			±60			±60		deg.

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

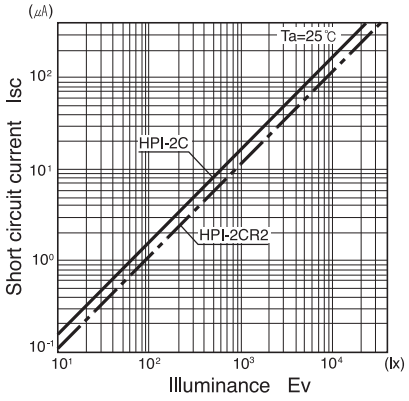
PIN Photodiode

HPI-2C · HPI-2CR2

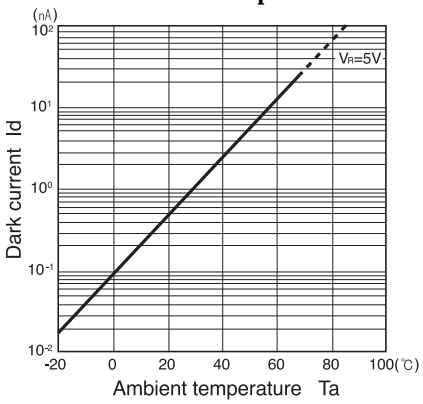
Light current Vs. Forward voltage



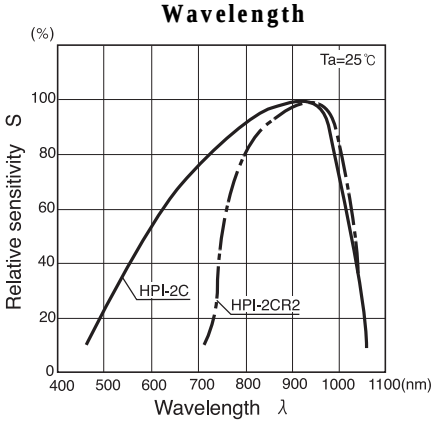
Short circuit current Vs. Illuminance



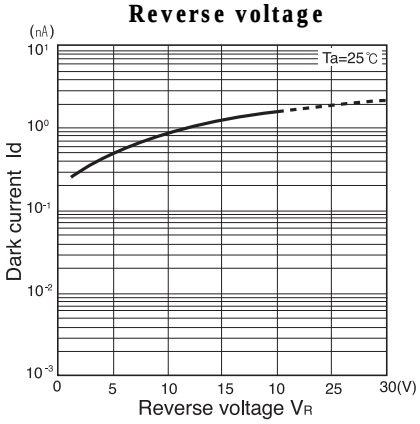
Dark current Vs. Ambient temperature



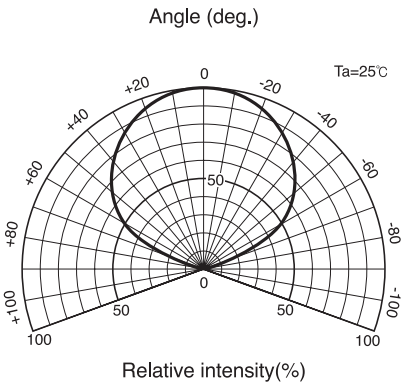
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage