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[参考] 规格书  
[REFERENCE] SPECIFICATIONS

发行番号	
品名	光敏集成电路管 Photo-IC
型号	SPIC1206-01
发行日	
发行部署	Design 2 Team

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在使用本制品时, 请注意以下事项.

Please obey the instructions mentioned below for actual use of this device.

1. 本制品是为一般电子产品所设计, 主要使用在以下产品中.

This device is designed for general electronic equipment.

Main use of this device are as follows;

- 计算机      · 办公自动化设备      · 通讯设备(终端)      · 测量设备      · 机床
- 工业机器人      · 音像设备      · 家用电器      等

\*Computer    \*Office Automation equipment    \*Telecommunication equipment(Te

\*Measuring instrument    \*Machine tool      \*Industrial robot

\*Audio Vidio equipment    \*Home appliance,etc.

2. 在以下需要高可靠性用途使用的场合, 请采取适当的措施以维持其可靠性和安全性.

Please take proper steps in order to maintain reliability and safety,

in case this device is used for the uses mentioned below which require high reliability.

- 交通工具 (飞机、火车、汽车等) 中有关控制和安全性的部分.
- 交通信号      · 煤气报警器      · 防灾防犯装置      · 各种安全装置      等

\*Unit concerning control and safety of a vehicle (air plane,train,automobile etc.)

\*Traffic signal    \*Gas leak detection breaker

\*Fire box and burglar alarm box    \*Other safety equipment,etc.

3. 在以下需要极高可靠性用途的场合, 请绝对不要使用.

Please don't use for the uses mentioned below which require extremely high reliability.

- 宇航机器      · 通信设备(干线)      · 原子能控制设备
- 医疗设备(任何涉及人的生命安全部分)      等

\*Space equipment    \*Telecommunication equipment(Trunk)

\*Nuclear control equipment    \*Medical equipment(relating to any fatal element),etc

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SPIC1206-01 which peak sensitivity is designed at  $\lambda_p = 490\text{nm}$ , is photo-IC daylight sensor without optical filter. It has both low drive voltage and output in proportion to illumination, and it has not sensitivity in a long wavelength domain.

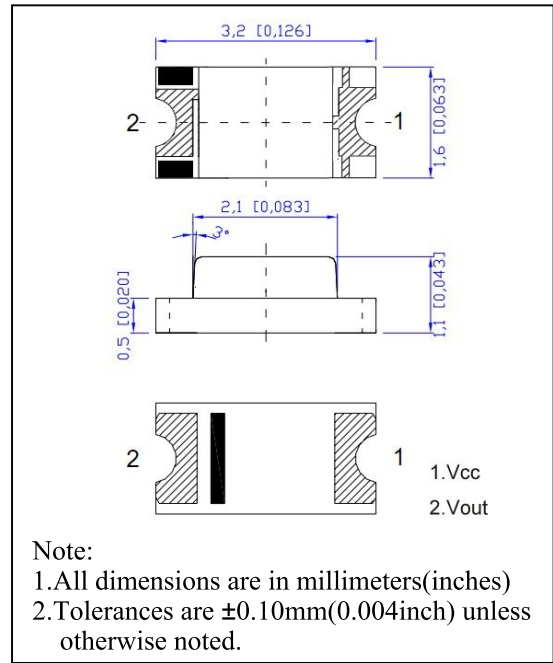
● **Features:**

1. Zero sensitivity in a long wavelength domain
2. A small current ratio between light sources
3. Without optical filter
4. Low voltage drive(1.8V~5.5V)
5. Analog current output in proportion to illumination

● **Applications:**

1. Control of brightness for LCD monitor, CRT monitor,
2. Switching for home lighting equipments,
3. Replacement of CdS cell

● **Package dimensions:**



● **Recommended items (Ta=25°C)**

Item	Symbol	Rating	Unit
Supply voltage	Vcc	+1.8~+5.5	V

● **Absolute maximum ratings(Ta=25°C)**

Item	Symbol	Rating	Unit
Supply voltage	Vcc	-0.5~+6.0	V
Operating temp. * 1	Topr.	-20~+85	°C
Storage Temp.	Tstg.	-30~+100	°C
Soldering temp.	Tsol.	260	°C

**Note :** \*1. Vcc=5V, RL=100Ω

● **Electrical and optical characteristics(Ta=25°C)**

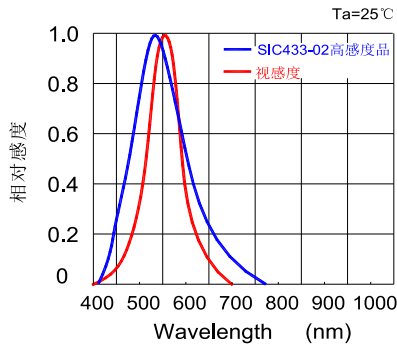
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Dark current	Id	Vcc=5V, Ev=0Lx	-	45	300	nA
Output current	IL (1)	Vcc=5V, Ev=100 lx * 2		210		μA
Output current	IL (2)	Vcc=5V, Ev=50 lx * 2		90		μA
Output current	IL (3)	Vcc=5V, Ev=10 lx * 2		15		μA
Spectral sensitivity	$\lambda$	-		400~750		nm
Peak wavelength	$\lambda_p$	-	-	490	-	nm
Half angle	$\Delta\theta$	-	-	±65	-	deg.

**Note :** \*2. light(Color temp. = 2850K LED)

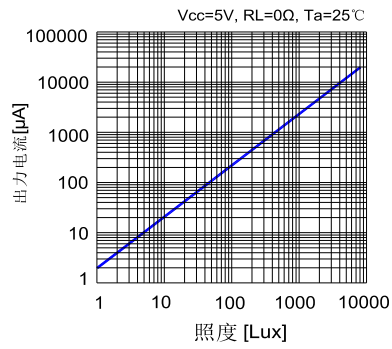
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● Typical electro-optical characteristics curves

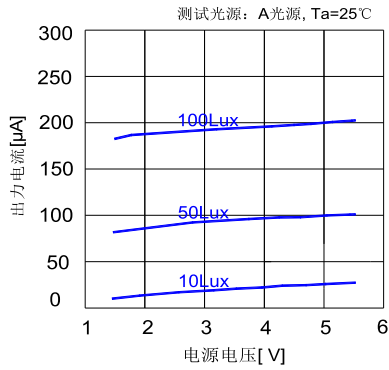
■ 分光感度特性 Spectral Sensitivity



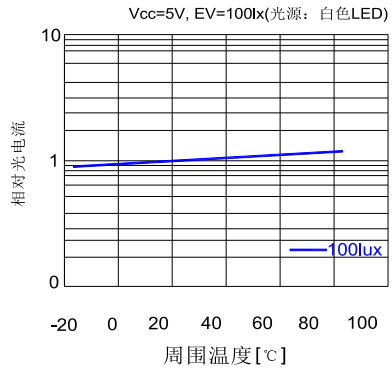
■ 光电流特性 Light Current



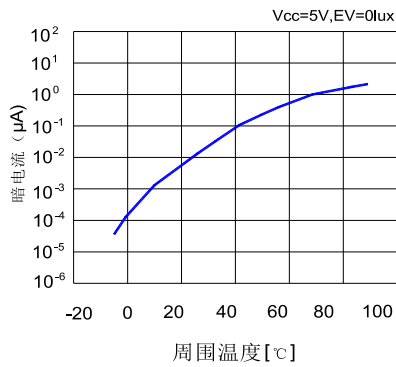
■ 光电流特性 Light Current  
Light Current against supply voltage



■ 光电流/周围温度特性



■ 暗电流/周围温度特性



■ 使用回路例

Typical application circuit

