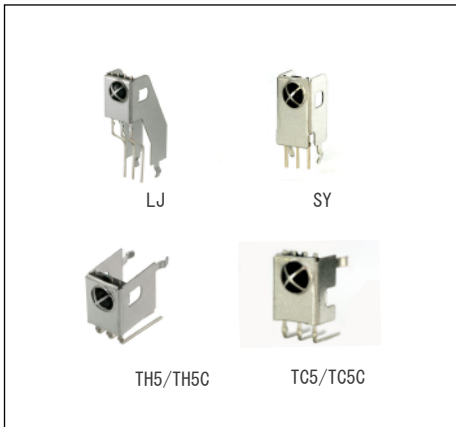


光リモコン受光モジュール OPTIC RECEIVER MODULE



PIC-A1814シリーズは、高感度、高速応答のフォトダイオードと信号処理回路を小型パッケージに内蔵した光リモコン受光センサです。

The PIC-A1814 series are compact type detecting sensors for optical remote control, which integrated a signal processing circuit with a high-sensitive, high-speed response photodiode.

▶ 特長 FEATURES

- ノイズに強い  
High noise immunity
- 小型・軽量  
Compact and lightweight design
- 長距離検出  
Long distance detecting
- 多様な形状  
Various shapes of package
- 同調周波数  
Tuning frequency: 36.7/37.9/40.0 KHz

▶ 用途 APPLICATIONS

光リモコン  
Optical remote control

▶ 最大定格 MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
電源電圧 Power Supply Voltage	V <sub>R</sub>	5.5	V
動作温度 Storage Temp.	Topr.	-10~+60 <sup>*1</sup>	°C
保存温度 Storage Temp.	Tstg.	-20~+75	°C
はんだ付け温度 Soldering Temp.	Tsol.	260 <sup>*2</sup>	°C

\*1. 結露無きこと  
No dew

\*2. リード根本より2mm離れたところで、最大5秒以内 はんだ付け時間は半田修正作業を含みます。  
Soldering should be within 5 seconds (max), including solder correcting time, at 2 mm from lead foundation.

▶ 電氣的光学的特性 ELECTRO-OPTICAL CHARACTERISTICS

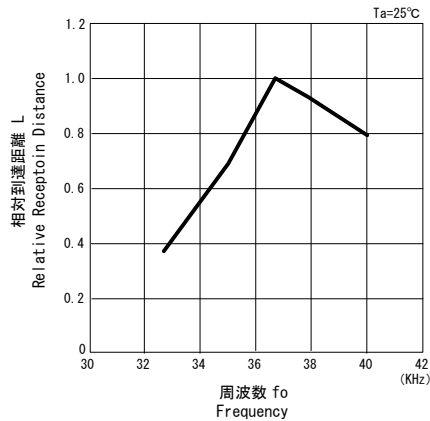
(Ta=25°C Vcc=5V)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
消費電流 Current Consumption	I <sub>cc</sub>	No signal	—	1.0	—	mA
ピーク感度波長 Peak Wavelength	λ <sub>P</sub>	No signal	—	940	—	nm
同調周波数 Tuning Frequency	f <sub>o</sub>	—	—	36.7/37.9/40.0	—	KHz
Hレベル出力電圧 H Level Output Voltage	V <sub>oh</sub>	By our typical projector	4.5	—	—	V
Lレベル出力電圧 L Level Output Voltage	V <sub>ol</sub>	By our typical projector	—	—	0.5	V
Hレベル出力パルス幅 H Level Output Pulse Width	T <sub>wh</sub>	By our typical projector	400	—	800	μs
Lレベル出力パルス幅 L Level Output Pulse Width	T <sub>wl</sub>	By our typical projector	400	—	800	μs
正面到達距離 Distance Between Emitter & Detector	l	By our typical projector	10	—	—	m
半値角 Half Angle	Δθ	X,Y direction	—	±45	—	deg.

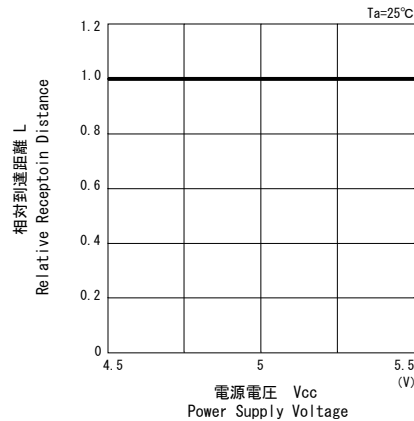
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光リモコン受光モジュール OPTIC RECEIVER MODULE

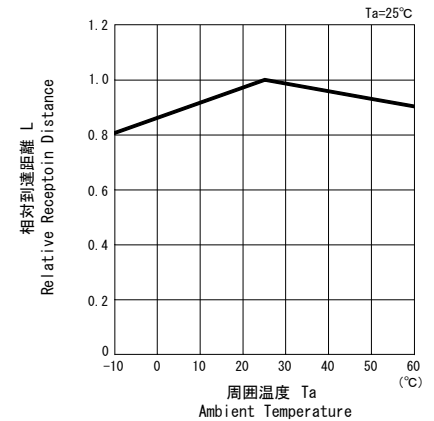
■到達距離/周波数特性 L/fo



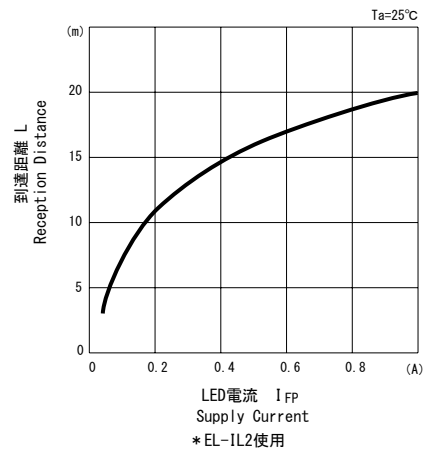
■到達距離/電源電圧特性 L/Vcc



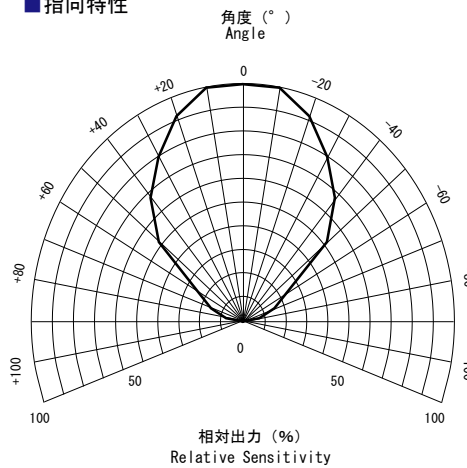
■到達距離/周囲温度特性 L/Ta



■到達距離/LED電流特性 L/I<sub>FP</sub>

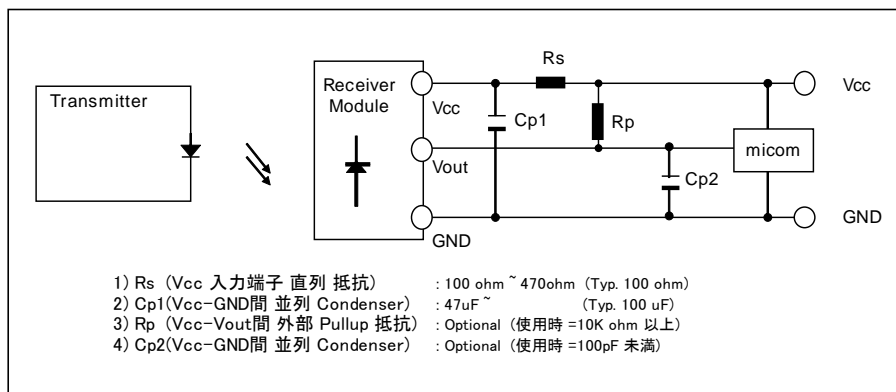


■指向特性



■推奨回路

電源ラインからのノイズ低減の為、必要に応じてVcc-GND間にデカップリング素子を外付けにてご使用下さい。  
Put decoupling device between Vcc and GND for reduce the noise from power supply line.



■端子配列 Pin arrangement

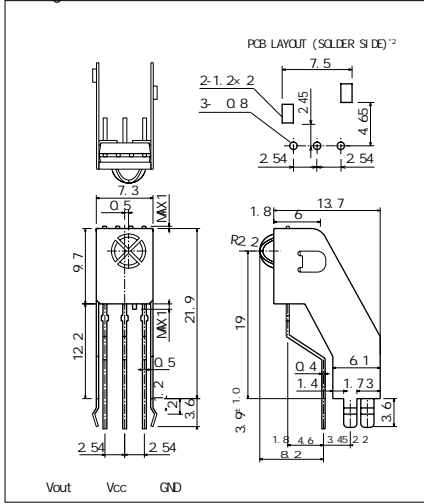
- PIC-A1804 series : ① Vout ② GND ③ Vcc  
 PIC-A1824 series/PIC-A1814 series : ① Vout ② Vcc ③ GND

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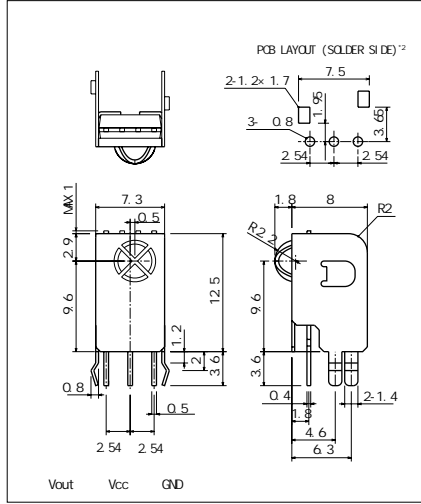
### OPTIC RECEIVER MODULE

#### ▶ DIMENSIONS(Unit : mm)

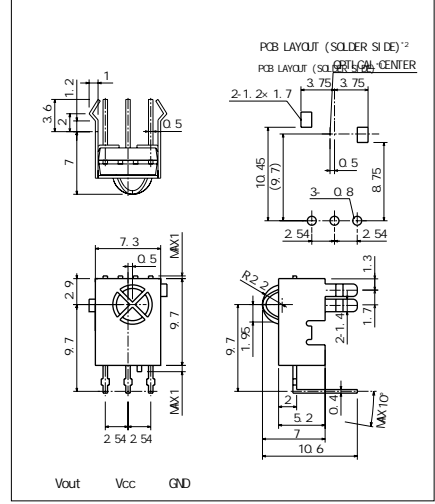
LJ: Long Lead/Si de View



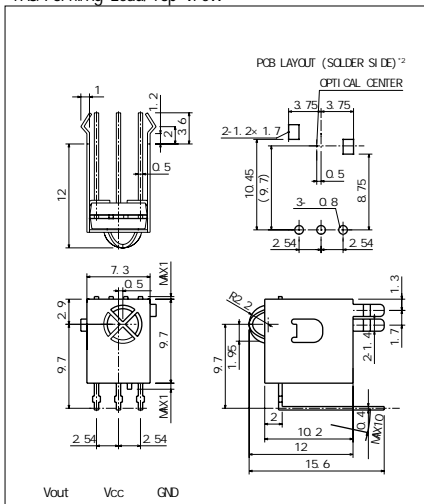
SY: Short Lead/Si de View



TC5: Forming Lead/Top View



TH5: Forming Lead/Top View



\*1. (1=40 KHz/2 36.7KHz/3 37.9KHz)  
of the type number contains a number to express the tuning frequency. (1=40 KHz/2 36.7KHz/3 37.9KHz)

\*2. Shield case should be grounded on PCB pattern.

\*3. TC5C, THEC TC5 TH5  
TC5C, THEC are high reliable version of TC5, TH5.

/A REFERENCE

URL <http://www.kodenshi.co.jp>

/SALES(WEST)  
/SALES(EAST)

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TEL 03-6455-0280 FAX 03-3461-1566

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