Photo Interrupter

KIT5033C

Description

The KIT5033C is a photo interrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor..

Features

Snap-in mount

GAP : 5.0mm

• 3 kinds of mounting plate thicknesses :

1.0mm, 1.2mm, 1.6mm

RoHS compliant

Applications

- Printers.
- Copiers
- ATM
- Ticket vending machines





Absolute Maximum Ratings (T_a=25°C, Unless otherwise specified)

| Characteristic | | Symbol | Ratings | Unit |
|--------------------------|---------------------------|------------------|------------|------|
| Input | Power Dissipation | P _D | 75 | mW |
| | Forward Current | l _F | 50 | mA |
| | Reverse Voltage | V_R | 6 | V |
| | Peak Forward Current*1 | I _{FP} | 1 | Α |
| Output | Collector Current | I _C | 20 | mA |
| | Collector-Emitter Voltage | V _{CEO} | 35 | V |
| | Emitter-Collector Voltage | V _{ECO} | 6 | V |
| Operating Temperature *2 | | Topr | -30 ~ +95 | °C |
| Storage Temperature *2 | | T _{stg} | -40 ~ +100 | °C |

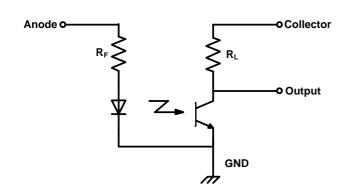
^{*1 :} Pulse width (tw) $\leq 100 \mu s$, Period (T) = 10msec.

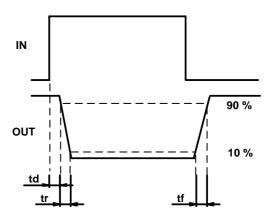
^{*2:} No icebond or dew.

Electrical Characteristics (T_a=25°C)

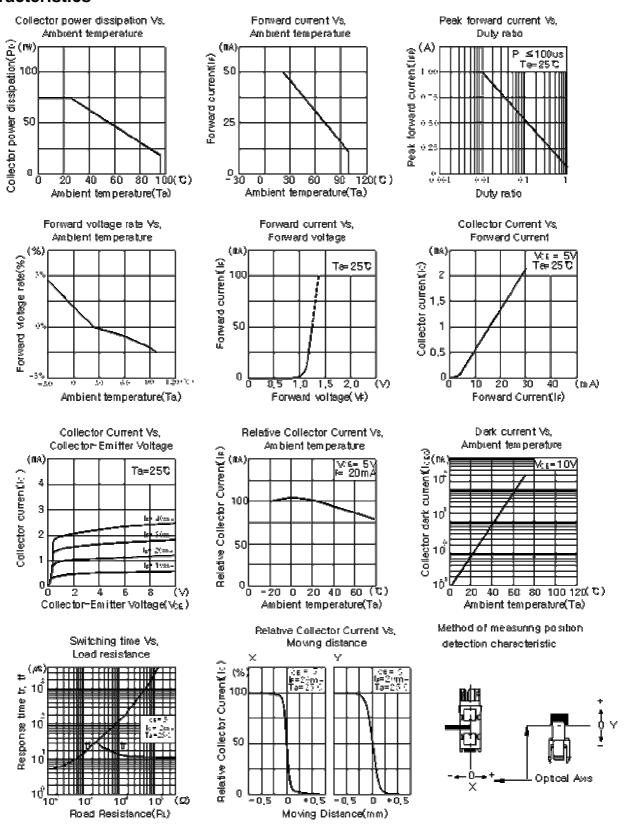
| Characteristic | | Symbol | Test Condition | Min. | Тур. | Max. | Unit |
|----------------------------------|---------------------------|----------------------|--|------|------|------|------|
| Input | Forward Voltage | V_{F} | I _F =20mA | - | 1.2 | 1.4 | V |
| | Peak Wavelength | λр | I _F =20mA | ı | 940 | - | nm |
| | Reverse Current | I_R | V _R =5V | 1 | - | 10 | uA |
| Output | Dark Current | I _{CEO} | V _{CE} =10V, E=0lux | ı | 1 | 100 | nA |
| | Peak Wavelength | λр | - | ı | 880 | - | nm |
| Transfer Charac- teristics | Collector Current | Ic | V_{CE} =5.0V, I_F =20mA | 0.5 | - | 15.0 | mA |
| | C-E Saturation Voltage | V _{CE(sat)} | I _C =0.5mA, I _F =20mA | ı | - | 0.4 | V |
| Response Time | Rise Time | t _r | V_{CC} =5.0V, I_{C} =2mA RL=100 Ω | - | 3 | 15 | usec |
| | Fall Time | t _f | | - | 4 | 20 | usec |

* Circuit for Measuring Response Time





Characteristics



Package Outline Dimensions

(ALL DIMENSIONS IN MILLIMETERS)

