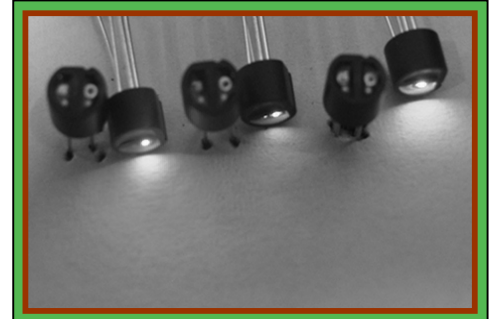


**Reflective Photo Interrupter Perception Color**  
(KIR-1001A, 1002A, 1003A)

**Description**

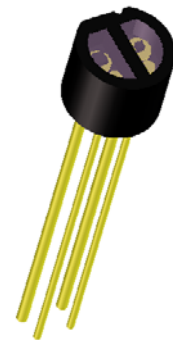
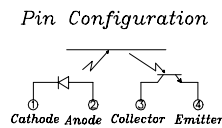
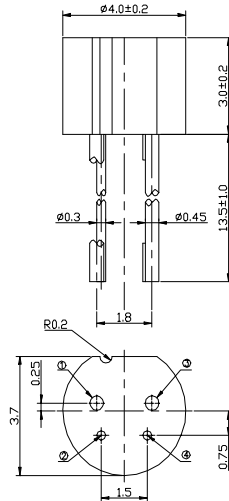
- It is applied mini opto sensor to Printers or Copiers.  
: Size :  $\Phi 4.0\text{mm} \times 3.0\text{mm}$
- It is high-performance standard type.  
: Combines a high-output Visible LED with a high sensitivity phototransistor.
- High reliability, Low power dissipation and Long life span.
- It is designed for use in general electric equipments such as OA, Household appliances, Industrial sensor, etc.



**Features**

- compact( $\Phi 4.0\text{mm}$ )
- Easy to mount on P.C.B.
- High performance
- High speed response
- Widely applicable

**Outline Dimensions**



**Application**

- Color Detector Sensor
- Printers
- Copiers

**Characteristics**

[Ta = 25 ]

| Parameter     | Symbol                               | 1001A    | 1002A    | 1003A | Unit | Condition     |  |
|---------------|--------------------------------------|----------|----------|-------|------|---------------|--|
| Input         | Forward voltage                      | VF       | 2.0      | 2.1   | 3.7  | V             | IF = 20mA                              |
|               | Reverse Current                      | IR       | Max. 10  | ←     | ←    | $\mu\text{A}$ | VR = 5V                                |
|               | Capacitance                          | CT       | 25       | ←     | ←    | pF            | f = 1kHz                               |
|               | Peak wavelength                      | P        | 639      | 572   | 474  | nm            | -                                      |
| Output        | Collector Dark Current               | ICEO     | Max. 100 | ←     | ←    | nA            | VCE = 10V<br>0 Lux                     |
| Transmission  | Leakage Current                      | ICEOD    | Max. 10  | ←     | ←    | $\mu\text{A}$ | VCE = 5V, IF=20mA<br>(Shading)         |
|               | Collector-Emitter Saturation Voltage | VCE(Sat) | Max. 0.4 | ←     | ←    | V             | IF=20mA, IC=0.1mA                      |
| Response Time | Rise Time                            | tr       | 50       | ←     | ←    | $\mu\text{s}$ | Vcc=5V, IC= 0.1 mA<br>RL = 1k $\Omega$ |