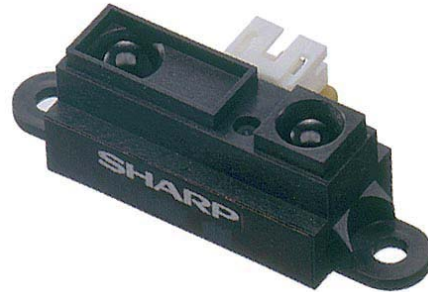


# GP2Y0A21YK0F

**Distance Measuring Sensor Unit**  
**Measuring distance: 10 to 80 cm**  
**Analog output type**



## ■Description

GP2Y0A21YK0F is a distance measuring sensor unit, composed of an integrated combination of PSD (position sensitive detector), IRED (infrared emitting diode) and signal processing circuit.

The variety of the reflectivity of the object, the environmental temperature and the operating duration are not influenced easily to the distance detection because of adopting the triangulation method.

This device outputs the voltage corresponding to the detection distance. So this sensor can also be used as a proximity sensor.

## ■Features

1. Distance measuring range : 10 to 80 cm
2. Analog output type
3. Package size : 29.5×13×13.5 mm
4. Consumption current : Typ. 30 mA
5. Supply voltage : 4.5 to 5.5 V

## ■Agency approvals/Compliance

1. Compliant with RoHS directive (2002/95/EC)

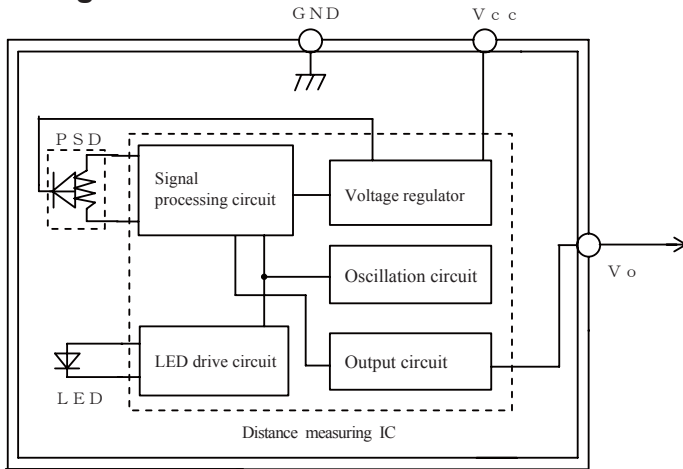
## ■Applications

1. Touch-less switch  
(Sanitary equipment, Control of illumination, etc.)
2. Robot cleaner
3. Sensor for energy saving  
(ATM, Copier, Vending machine)
4. Amusement equipment  
(Robot, Arcade game machine)

Notice The content of data sheet is subject to change without prior notice.

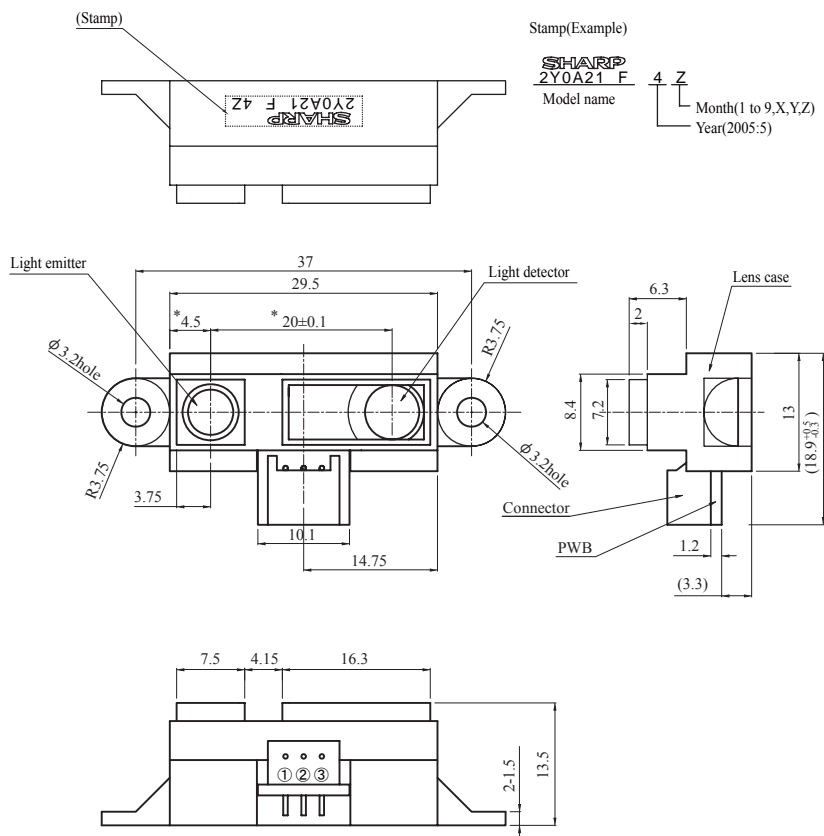
In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

## Block diagram



## Outline Dimensions

(Unit : mm)



### Connector signal

Signal name	Connector
① Vo	J.S.T. TRADING COMPANY, LTD, S3B-PH
② GND	
③ Vcc	

Connector :  
J.S.T. TRADING COMPANY, LTD,  
S3B-PH

### Materials

Lens : Acrylic acid resin  
(Visible light cut-off resin)  
Case : Carbonic ABS  
(Conductive resin)  
PWB : Paper phenol

Note 1. The dimensions marked \* are described the dimensions of lens center position.

Note 2. Unspecified tolerances shall be  $\pm 0.3$  mm.

Note 3. The dimensions in parenthesis are shown for reference.

Product mass : Approx. 3.6g