

GP2Y0D805Z0F

Distance Measuring Sensor Unit
Digital output (50 mm) type



■ Description

GP2Y0D805Z0F 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.

The output voltage of this sensor stays high in case an object exists in the specified distance range. So this sensor can also be used as proximity sensor.

■ Features

1. Digital output type
2. Short distance type
Detecting distance : Typ. 50 mm
3. Low profile
Package size : 13.6×7×7.95 mm
4. Consumption current : Typ. 5 mA
5. Battery drive compatible
Supply voltage : 2.7 to 6.2 V
6. Sunlight tolerance
7. Add Vin terminal, and an external transistor of Vcc line is unnecessary at intermittent operating.

■ Agency approvals/Compliance

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

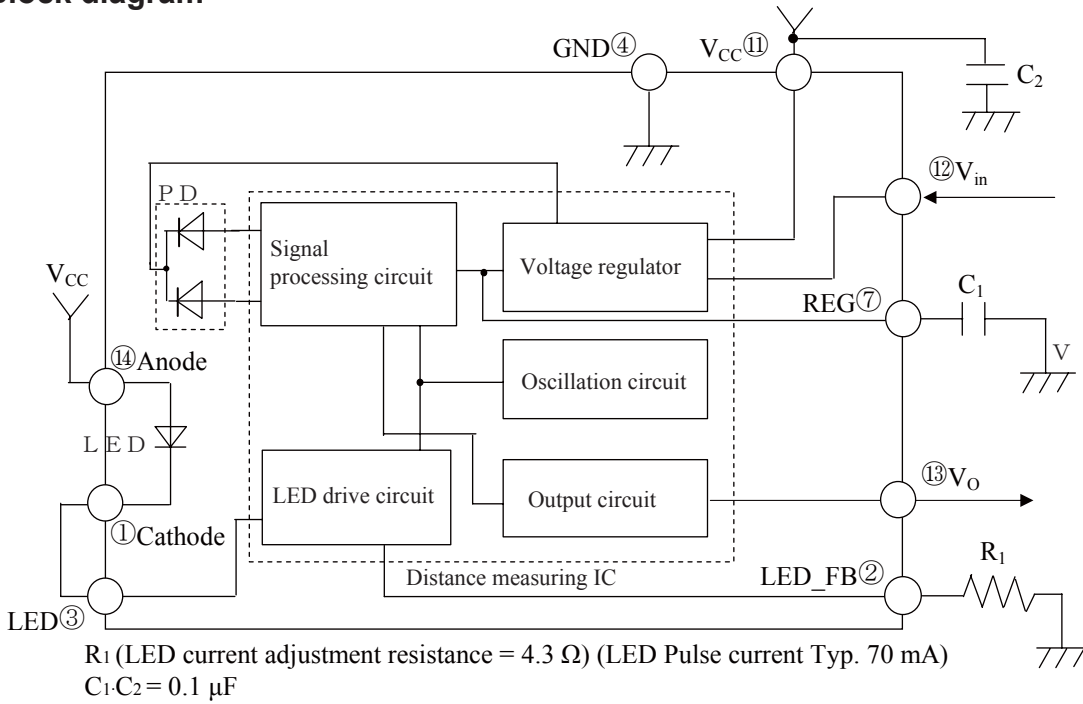
■ Applications

1. Touch-less switch
(Sanitary equipment, Control of illumination, etc.)
2. Robot cleaner

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Block diagram



Outline Dimensions

(Unit : mm)

Symbol	Function
①	Cathode
②	LED_FB
③	LED
④	GND
⑤	—
⑥	—
⑦	REG
⑧	—
⑨	—
⑩	—
⑪	V _{CC}
⑫	V _{in}
⑬	V _O
⑭	Anode

— : No contact

Material	Part	Material
A	Case	PC (Color:Black)
B	Lens	PC(Visible light cut type)
C	Device coating	PPS(Color:Black)
D	Lead pin	42ALLOY(Pd-Au plating)

year	Mark
2006	U
2007	V
2008	W
2009	X
⋮	⋮
2025	T
2026	U

(Note1) Unspecified tolerances shall be ± 0.3 mm.
(Note2) () : Reference value

Product mass : approx. 0.7g