SHARP GP2Y0D340K

GP2Y0D340K

■ Features

1. Less influence on the color of reflective objects, reflectivity

2. Line-up of distance judgement type Detecting distance:10 to 60cm

Judgement distance:40cm

(Adjustable within the range of 10 to 60cm [Optionally available])

3. External control circuit is unnecessary

■ Applications

- 1. LCD monitor
- 2. Sanitary equipment
- 3. Personal computers
- 4. Game machine

■ Absolute Maximum Ratings (T_a=25°C, V_{CC}=5V)

Parameter	Symbol	Rating	Unit
Supply voltage	V _{CC}	-0.3 to +7	V
Output terminal voltage	Vo	-0.3 to $V_{CC} + 0.3$	V
Operating temperature	Topr	-10 to +60	°C
Storage temperature	T _{stg}	-20 to +70	°C

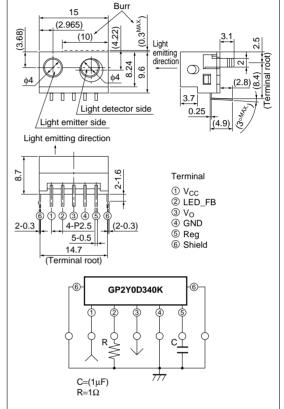
■ Recommended Operating Conditions

Parameter	Symbol	Rating	Unit	
Operating supply voltage	Vcc	4.5 to +5.5	V	

Compact Distance Measuring Sensors



(Unit: mm)



- * The dimensions marked * are described the dimensions of lens center position
- * Unspecified tolerance:±0.3mm
- * Lens position is not fixed for adjustment detection distance

■ Electro-optical Characteristics

$(T_a=25)$	C,	$V_{CC}=5$	√)
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Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Distance measuring range	ΔL	*1 *3	10	-	60	cm
Output torminal valtage	V_{OH}	Output voltage at High *1	V _{CC} -0.3	-	=	V
Output terminal voltage	V_{OL}	Output voltage at Low*1	_	_	0.6	V
Distance characteristics of output	Vo	*1 *4 *2	35	40	45	cm
Average dissipation current	I_{CC}	at $R_1=1\Omega$	_	28	35	mA

Note) L: Distance to reflective object

- *1 Using reflective object: White paper (Made by Kodak Co. Ltd. gray cards R-27 · white face, reflective ratio;90%)
- *2 We ship the device after the following adjustment: Output switching distance L=40cm±5cm must be measured by the sensor
- *3 Distance measuring range of the optical sensor system
- *4 Output switching has a hysteresis width. The distance specified by Vo should be the one with which the output L switches to the output H

Fig.1 Internal Block Diagram

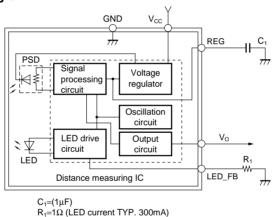


Fig.2 Timing Chart

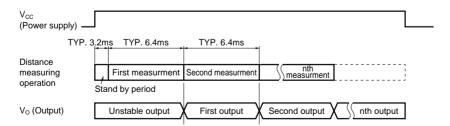
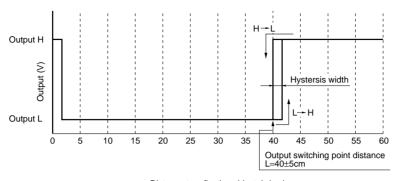


Fig.3 Distance Characteristics



Distance to reflective object L (cm)

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