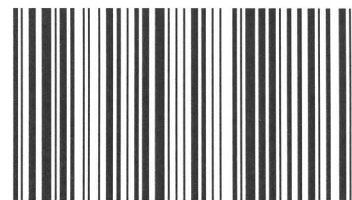


GP2Y0A21YK0F

Distance Measuring Sensor



4016138616668

504591

■ Features

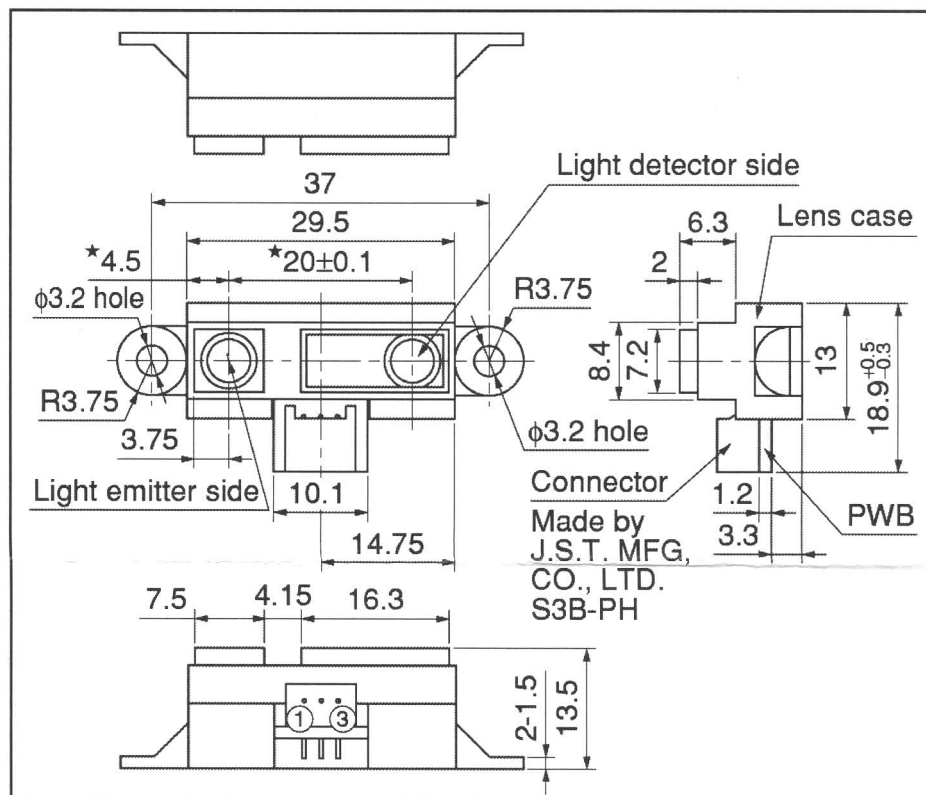
1. Measuring distance: 10 to 80 cm
2. Analog output type

■ Applications

1. TVs
2. Personal computers
3. Amusement equipment
4. Measuring equipment
5. Copiers

■ Outline Dimensions

(Unit : mm)



■ Absolute maximum ratings

($T_a=25^{\circ}\text{C}$, $V_{CC}=5\text{V}$)

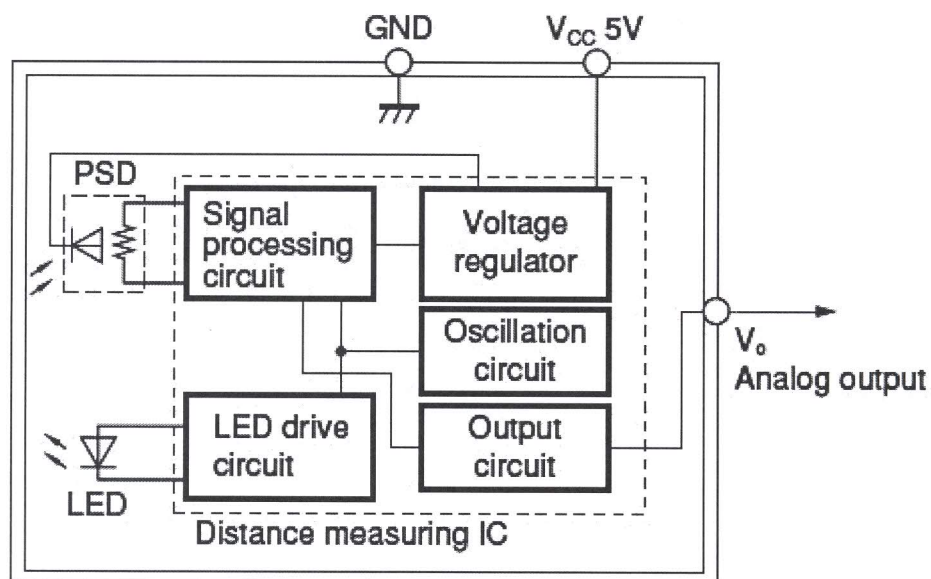
Parameter	Symbol	Rating	Unit
Supply voltage	V_{CC}	-0.3 to +7	V
Output terminal voltage	V_O	-0.3 to $V_{CC}+0.3$	V
Operating temperature	T_{opr}	-10 to +60	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-40 to +70	$^{\circ}\text{C}$

■ Electro-optical Characteristics

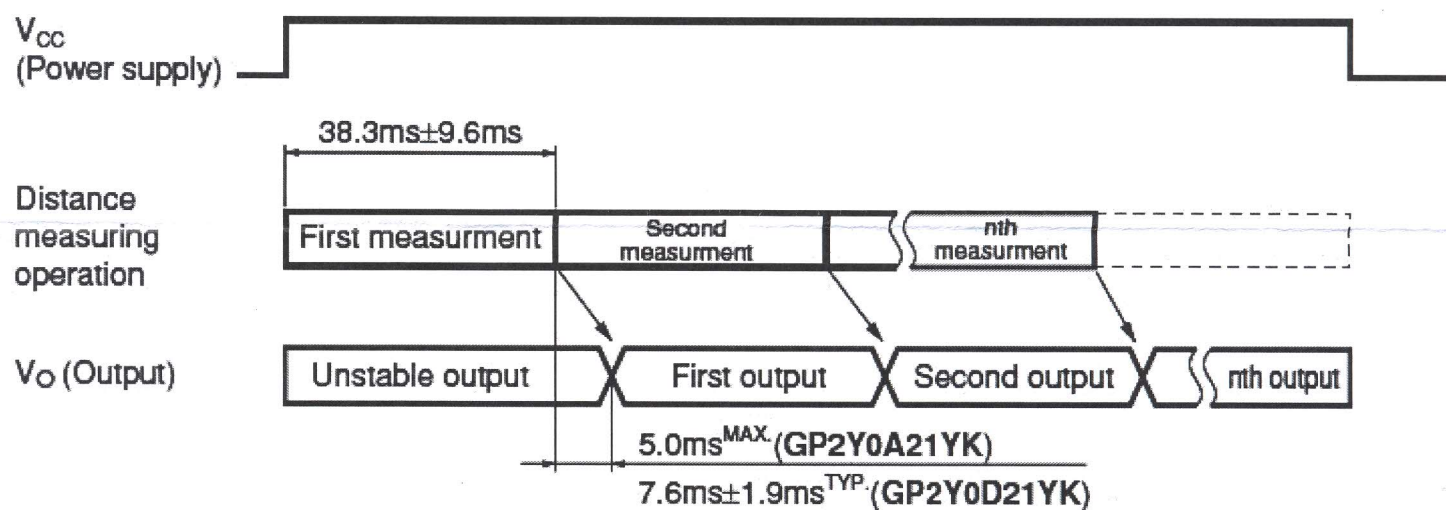
($T_a=25^{\circ}\text{C}$, $V_{CC}=5\text{V}$)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Distance measuring range	ΔL	*1 *3	10	-	80	cm
Output terminal voltage	GP2Y0A21YK V_O	$L=80\text{cm}$ *1	0.25	0.4	0.55	V
	GP2Y0D21YK V_{OH}	Output voltage at High *1	$V_{CC}-0.3$	-	-	V
	V_{OL}	Output voltage at Low *1	-	-	0.6	V
Difference of output voltage	GP2Y0A21YK ΔV_O	Output change at $L=80\text{cm}$ to 10cm *1	1.65	1.9	2.15	V
Distance characteristics of output	GP2Y0D21YK V_O	*1 *4 *2	21	24	27	cm
Average Dissipation current	I_{CC}	$L=80\text{cm}$ *1	-	30	40	mA

Internal Block Diagram



Timing Chart



Distance Characteristics

