■Absolute Maximum Ratings

	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
	Input terminal voltage	V_{in}	-0.3 to V_{CC}+0.3	V
	Operating temperature	T_{opr}	-10 to +60	℃
	Storage temperature	T_{stg}	-20 to +70	℃
*	Soldering temperature	T_{sol}	260	℃

■Electro-optical Characteristics

(T_a=25℃, V_{CC}=5V)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Average supply current	I_{CC1}	V_{CC}=5V, V_{in}=5V, R_1=4.3Ω (*1)	—	5	6.5	mA
Average supply current	I_{CC2}	V_{CC}=5V, V_{in}=5V, R_1=4.3Ω (*1)	—	9	10.5	mA
Stand-by supply current	I_{CC3}	V_{CC}=5V, V_{in}=0V	—	5	8	μA
Output voltage	V_{OH}	Output voltage at high level	V_{CC}-0.6	—	—	V
	V_{OL}	Output voltage at low level	—	—	0.6	V
Detecting distance	L	(*2)(*3)	40	50	60	mm

(*1) I_{CC1} : (LED Emitting time : Typ. 20 μs × 8 times), I_{CC2} : (Emitting time : Typ. 20 μs × 15 times),
LED Pulse Current : Typ. 70 mA

(*2) Using reflective object : White paper (Made by Kodak Co., Ltd. gray cards R-27·white face, reflectance ; 90%)

(*3) Output voltage switch has a hysteresis width. The distance specified by L should be the distance which the output turns from L to H in case an object moves to the sensor.

■Recommended operating conditions

Parameter	Symbol	Conditions	Rating	Unit
Supply voltage	V_{CC}		2.7 to 6.2	V
High level input voltage	V_{inH}	CMOS level signal. Operating	MIN V_{CC}-0.2	V
Low level input voltage	V_{inL}	CMOS level signal. Standby state	MAX 0.2	V

Fig. 1 Timing chart