

**■ Absolute Maximum Ratings** (Ta=25°C, Vcc=5V)

Parameter	Symbol	Rating	Unit
Supply voltage	V <sub>CC</sub>	-0.3 to +7	V
Output terminal voltage	V <sub>O</sub>	-0.3 to V <sub>CC</sub> +0.3	V
Input Voltage	V <sub>in</sub> H/L LED H/L	-0.3 to V <sub>CC</sub> +0.3	V
Operating temperature	T <sub>opr</sub>	-10 to +60	°C
Storage temperature	T <sub>stg</sub>	-40 to +70	°C

**■ Electro-optical Characteristics** (Ta=25°C, Vcc=5V)

Parameter	Symbol	Rating	MIN.	TYP.	MAX.	Unit
Average supply current	I <sub>CC</sub>		—	30	50	mA
Distance measuring range	ΔL	(Note 1)	40	—	300	cm
Output voltage	V <sub>O</sub>	L = 40 cm (Note 1)	2.0	2.3	2.6	V
Output voltage differential	ΔV <sub>O</sub>	Output voltage difference between L=40cm and L=100cm (Note 1)	0.9	1.2	1.5	V
Input voltage	V <sub>inH</sub>	Input voltage for operating distance measuring sensor	4.5	—	—	V
	V <sub>inL</sub>	Input voltage for turning off distance measuring sensor	—	—	0.3	V
	LED H	Input voltage for turning LED on	4.5	—	—	V
	LED L	Input voltage for turning LED off	—	—	0.5	V

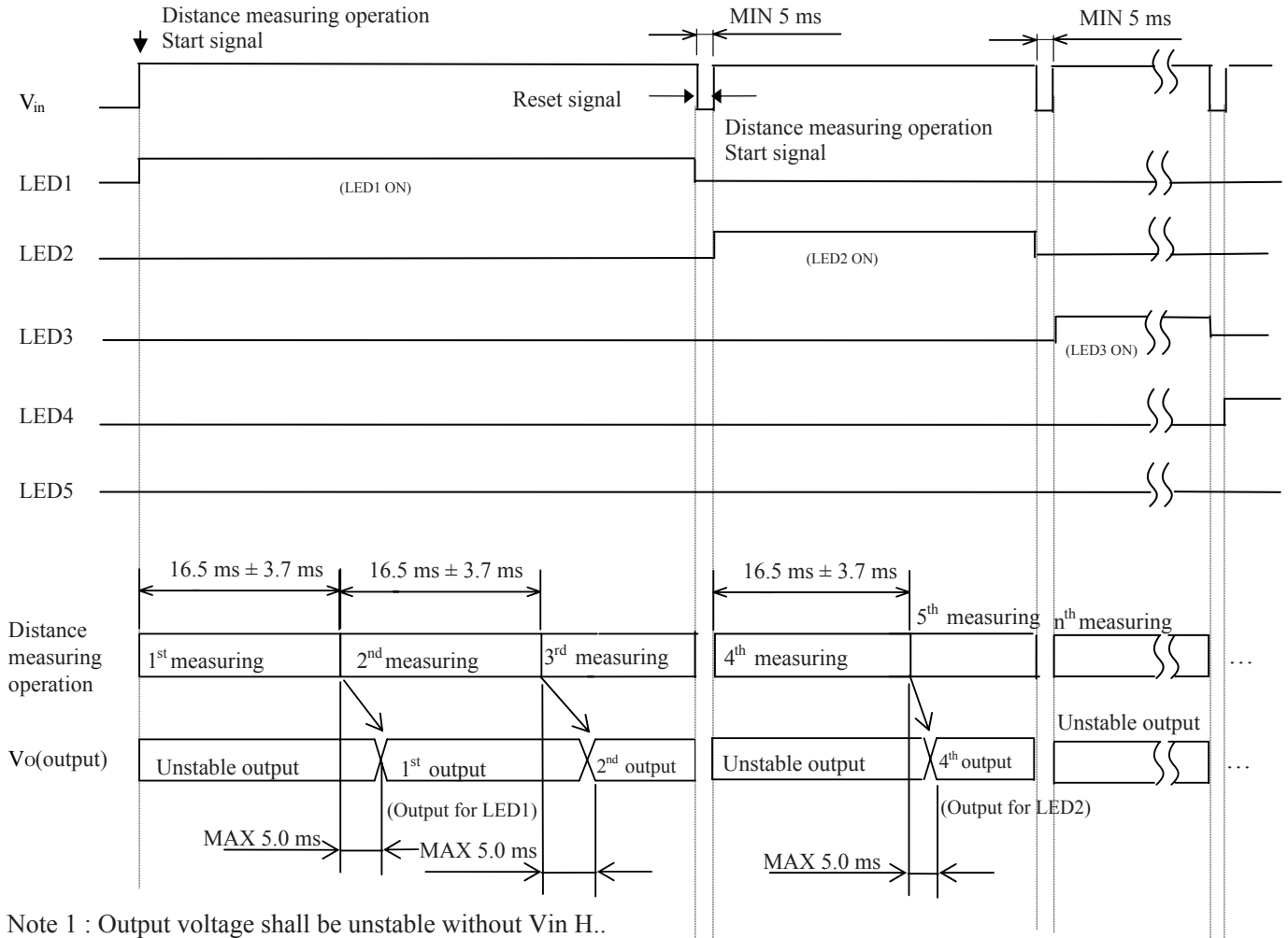
\* L : Distance to reflective object

Note 1 : Using reflective object : White paper (Made by Kodak Co., Ltd. gray cards R-27·white face, reflectance; 90%)

**■ Recommended operating conditions**

Parameter	Symbol	Conditions	Rating	Unit
Supply voltage	V <sub>CC</sub>		4.5 to 5.5	V

**Fig. 1 Timing chart**



Note 1 : Output voltage shall be unstable without  $V_{in}$  H..

Note 2 : Please don't turn on more than two LEDs at the same time.