

Electro-optical Characteristics

(Ta=25°C, Vcc=5V)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Distance measuring range	ΔL	*1,*3	10	-	80	cm
Output terminal voltage	V_{OH}	Output voltage at High, *1	$V_{CC}-0.3$	-	-	V
	V_{OL}	Output voltage at Low, *1	-	-	0.3	V
Distance characteristics of output	V_O	*1,*2	-	24	-	cm
Average dissipation current	I_{CC}	*4	-	10	22	mA
Dissipation current at OFF-state	I_{ccoff}	*5	-	3	8	μA
V_{in} terminal current	I_{vin}	$V_{in} = 0V$	-	- 160	- 270	μA

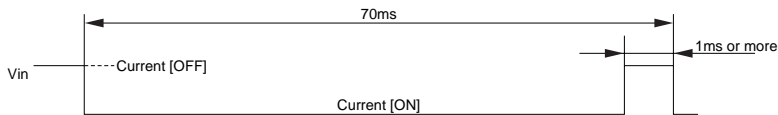
L : Distance to reflective object

*1 Reflective object : White paper (reflectivity : 90%)

*2 Adjustment shall be available with the VR built in the sensor so that the output switching distance may be L=24 cm.

*3 Distance measuring range on conditions after adjustment of the output switching distance to L=24

*4 Average dissipation current measured on the conditions shown below

*5 Dissipation current when V_{in} terminal is in High (current OFF) state.*6 V_{in} terminal : Open drain drive input.Conditions : V_{in} terminal current at V_{in} OFF-state $\geq 2.6V$ V_{in} terminal current at V_{in} ON-state $\leq 0.2V$

Timing Chart

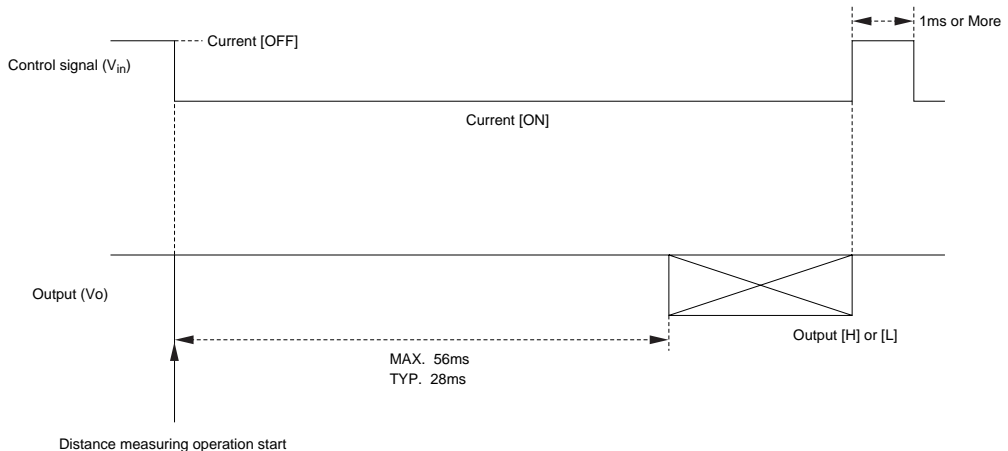


Fig. 1 Distance Measuring Output vs. Distance to Reflective Object

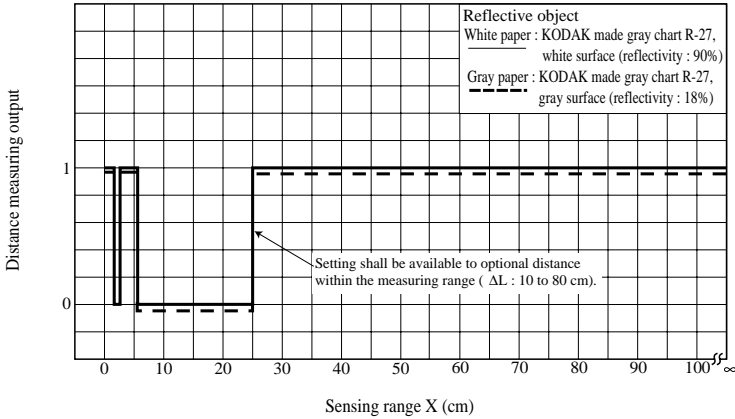
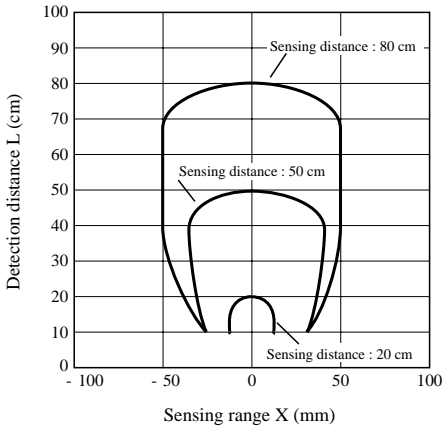


Fig. 2 Detection Distance vs. Sensing Range



Test Method for Sensing Range Characteristics

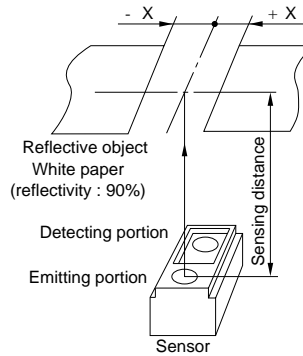
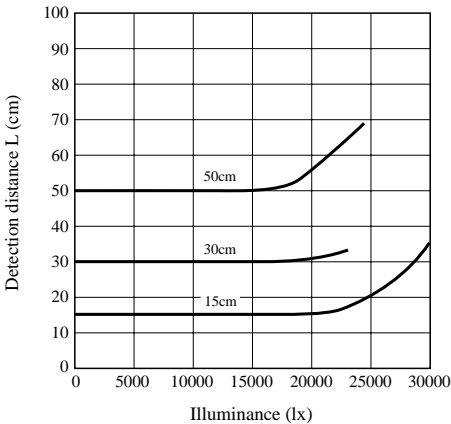


Fig. 3 Detection Distance vs. Illuminance



Test Method for Anti External Disturbing Light Characteristics

