

KR1207

Light modulation type

Description

Model **KR1207** consists of a Red LED and a Light modulation type of Photo IC, and has plastic housing.

Feature

- Long detecting distance.
- Low Cost.
- Easy removing in paper-dust.
- Measures of Visible light affection.
(Light-modulation type)
- Available for detection of dark paper/OHP film.

Application

- Paper detection in Copying machine, Printer, and Facsimile.
- Object passing for Card reader, Auto vending machine.

Absolute Maximum Ratings

[Ta=25°C Unless otherwise noted]

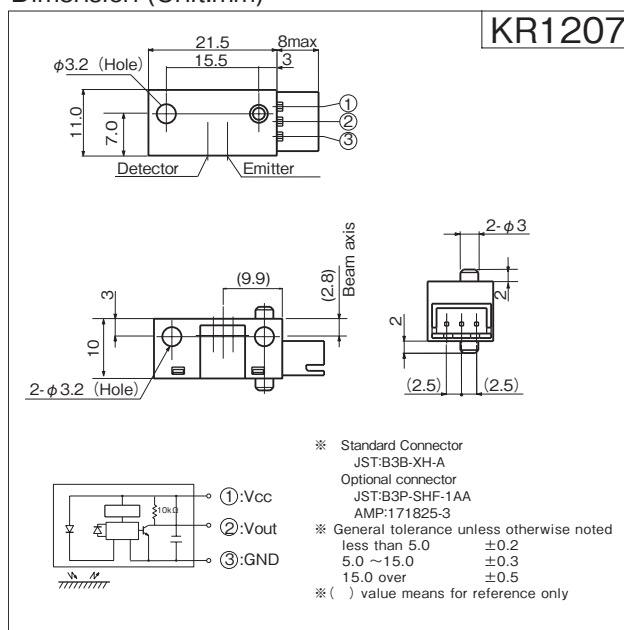
Item	Symbol	Rating	Units
Supply Voltage	V _{CC}	7	V
Output Current	I _O	50	mA
Operating Temperature	T _{opr}	-10 ~ +60	°C
Storage Temperature	T _{stg}	-20 ~ +80	°C

Electro-Optical Characteristics

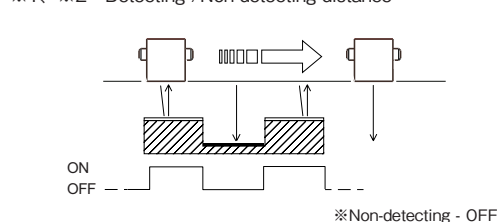
[V_{CC}=5V, Ta=25°C Unless otherwise noted]

Item	Symbol	Condition	min.	typ.	max.	Units
Supply Voltage	V _{CC}		4.75	5.0	5.25	V
Current Consumption	I _{CCP}		—	—	150	mA
	I _{CC}		—	—	20	mA
Low Level Output Voltage	V _{OL}	I _{OL} =16mA Object exiting	—	—	0.4	V
High Level Output Voltage	V _{OH}	No object	V _{CC} × 0.9	—	—	V
Detecting Distance※1	d1	Object 90% Reflective paper	1	—	15	mm
Non Detecting Distance※2	d2		—	—	55	
Ambient Illumination	—	CIE STD. A light source	2000	—	—	lux
Response Time	"High" → "Low"	※3	—	—	1	msec
	"Low" → "High"		—	—	1	

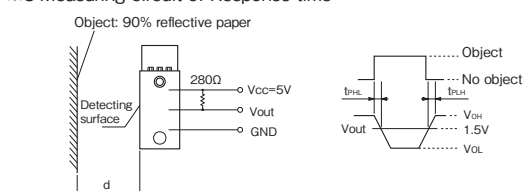
Dimension (Unit:mm)



※1、※2 : Detecting /Non-detecting distance



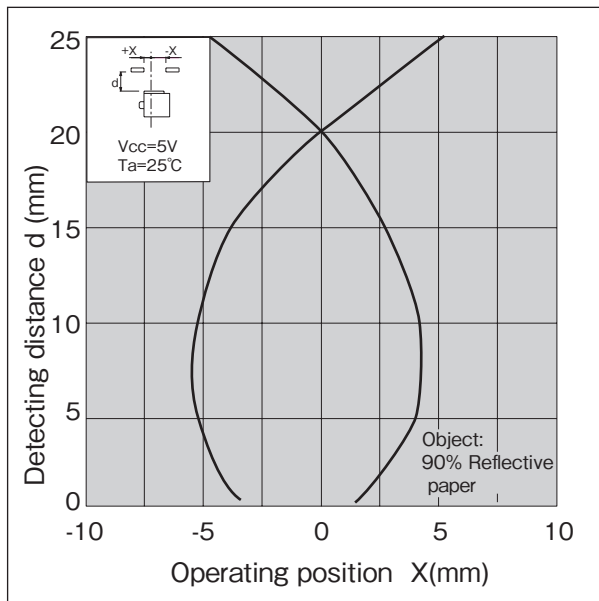
※3:Measuring circuit of Response time



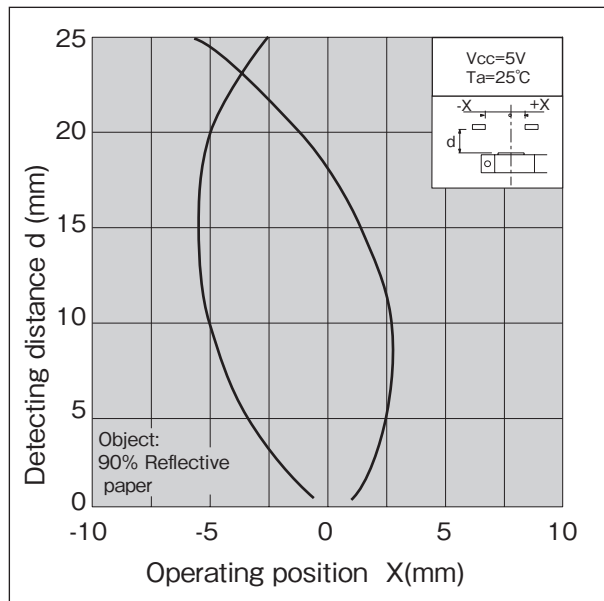
KR1207

Note: Operation never exceeds each value of Absolute Maximum Ratings.

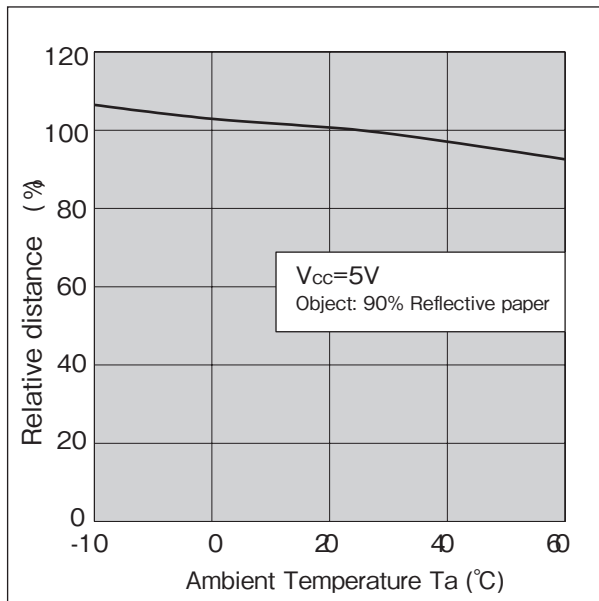
Operating Position vs Detecting Distance
(typ. - 1-)



Operating Position vs Detecting Distance
(typ. - 2-)



Detecting Distance vs Ambient Temperature
(typ.)



Series Line-Up

(Unit:mm)

Model No.	Method	Detecting Distance			Non-Detecting Distance
		90% Reflective paper	Black Paper ※ OD=1.2	OHP ※	
KR865	Light-Modulation	7 ~ 25	13 ~ 17	10 ~ 20	60
KR866		4 ~ 32	10 ~ 20	8 ~ 25	75
KR895		1.5 ~ 7	2.5 ~ 5.5	2 ~ 6	30
KR1207		1 ~ 15	2.5 ~ 4.5	2 ~ 7	55
KR864	Direct Current	7 ~ 11	8 ~ 9	7 ~ 10	30
KR894		2 ~ 5.5	3.5 ~ 4.5	2 ~ 5.5	15

※ Detecting Distance of Black paper and OHP film are reference only.

- A Custom designed package is available on request.
- Specification are subject to change without notice.

04.09-1A

shinkoh electronics co., ltd.

Head Office: 3-16-9, Minami-Kamonomiya, Odawara, Kanagawa
Zip code: 250-0875 Japan
Tel: +81 -465-45-1212 / Fax: +81 -465-45-1213
Tokyo Office: 5F, Ebuchi Bldg., 3-24-13, Minami-Ohi, Shinagawa,
Tokyo
Website: <http://www.shinkoh-elecs.com/>