

KR865

Light modulation type

Description

Model **KR865** consists of an Infra Red LED and a Light modulation type of Photo IC, and has one piece seamless plastic housing.

Feature

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

Application

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

Absolute Maximum Ratings

[$T_a=25^\circ\text{C}$ Unless otherwise noted]

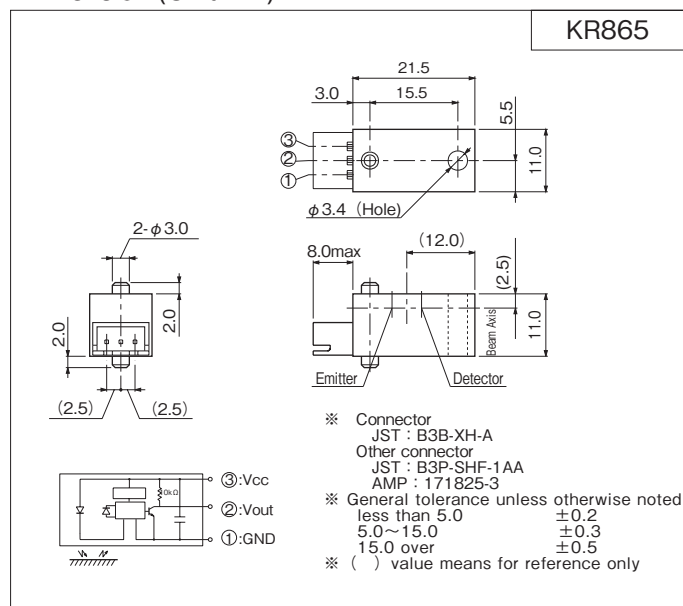
Item	Symbol	Rating	Units
Supply Voltage	V_{CC}	7	V
Output Current	I_o	50	mA
Operating Temperature	T_{opr}	-10 ~ +60	$^\circ\text{C}$
Storage Temperature	T_{stg}	-20 ~ +80	$^\circ\text{C}$

Electro-Optical Characteristics

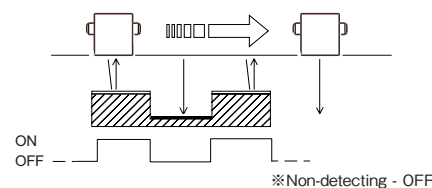
[$V_{CC}=5\text{V}$, $T_a=25^\circ\text{C}$ Unless otherwise noted]

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}	$I_{oL}=16\text{mA}$ at detecting	—	—	0.4	V
High Level Output Voltage	V_{OH}	Non at detecting	$V_{CC} \times 0.9$	—	—	V
Detecting Distance*1	d_1	Object 90% Reflective paper	7	—	25	mm
Non-Detecting Distance*2	d_2		—	—	60	
Ambient Illumination	—	CIE STD. A light source	2000	—	—	lux
Response Time	"High" → "Low"	*3	—	—	1	msec
	"Low" → "High"		—	—	1	

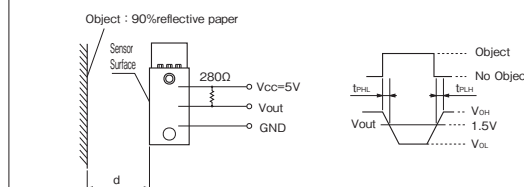
Dimension (Unit:mm)



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



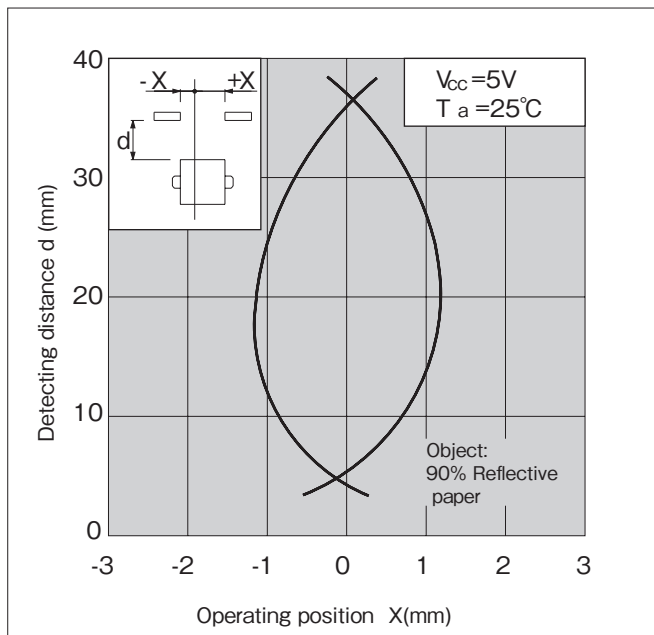
*3: Measuring circuit of Response time



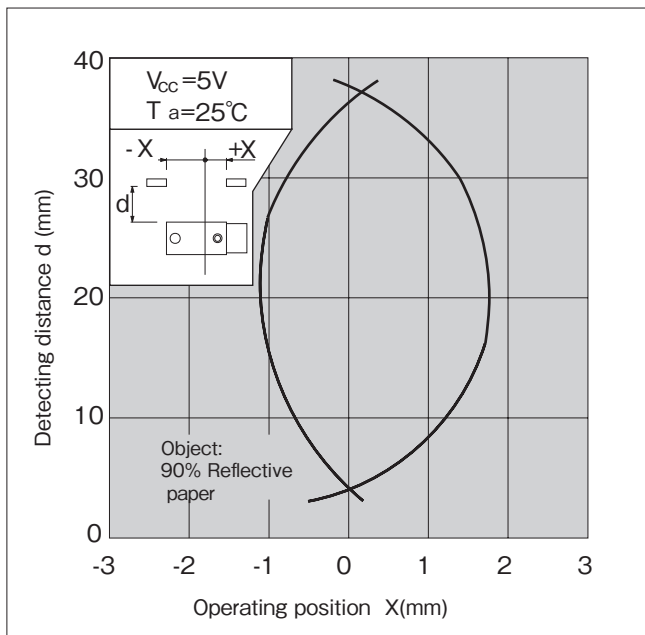
KR865

Characteristics

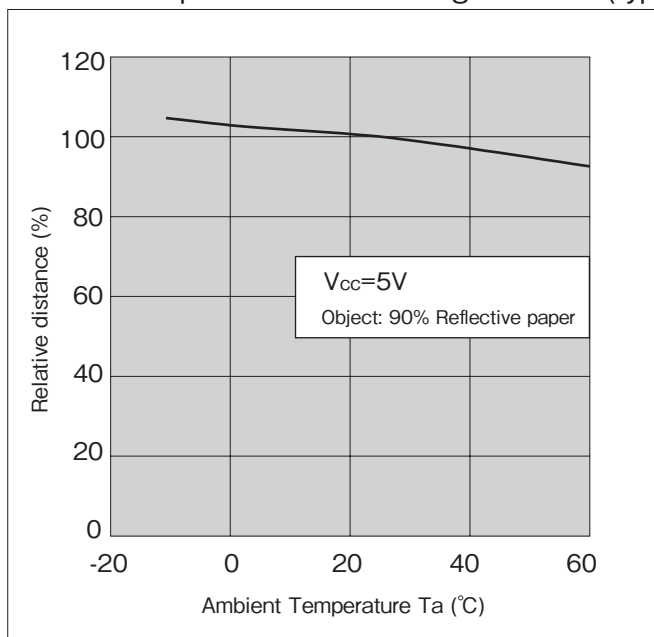
Operating Position vs
Detecting Distance 1 (typ.)



Operating Position vs
Detecting Distance 2 (typ.)



Ambient Temperature vs Detecting Distance (typ.)



Series Line-Up

(Unit:mm)

Model No.	Method	Detecting Distance			Non-Detecting Distance
		90% Reflective paper	Black Paper OD=1.2 ※	OHP ※	90% Reflective paper
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 by 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

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