

Photo Interrupter

KI1215,1216

Wide Gap Type

Description

Model **KI1215/1216** consist of an Infra Red LED and a High sensitive Photo IC(Digital Output).

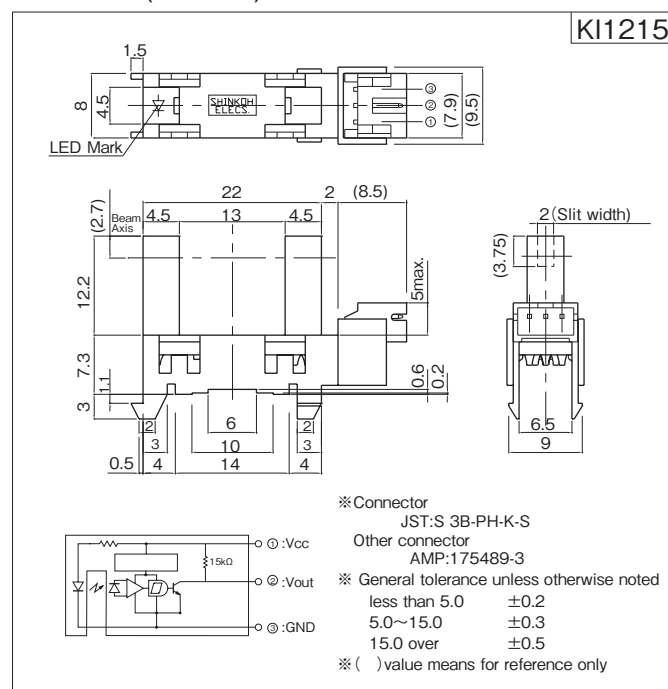
Feature

- Wide gap-13mm, Deep ditch-12.2mm.
- Built-in amplifier.
- Other models Phototransistor out put type ... **KI1220**

Application

- Object passing for Card reader, Bill exchanger.
- Coin-passing for Auto vending machine and Amusement.
- Toner remaining detection in Copy machine and Printing machine.
- Pachinko ball detection.

Dimension (Unit:mm)

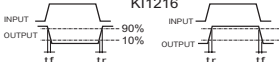


Absolute Maximum Ratings
[Ta=25°C Unless otherwise noted]

Item	Symbol	Rating	Units
Supply Voltage	V _{CC}	6	V
Low Level Output Current	I _{OL}	50	mA
Operating Temperature	T _{opr}	-20 ~ +75	°C
Storage Temperature	T _{stg}	-40 ~ +80	°C

Model	Operating mode
KI1215	at Beam detecting Low
KI1216	at Beam detecting High

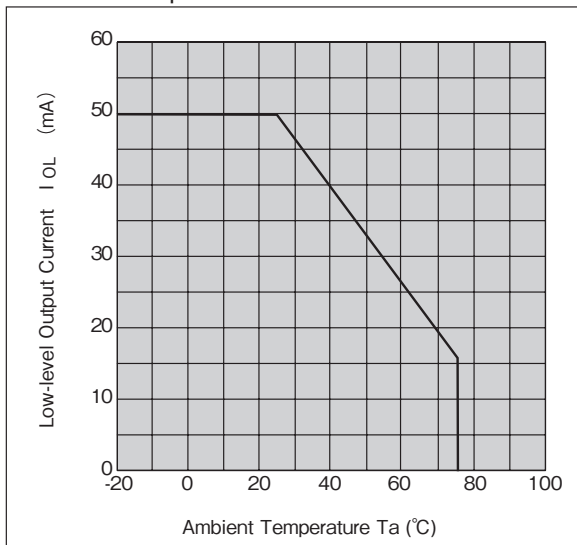
Electro-Optical Characteristics [V_{CC}=5V, Ta=25°C Unless otherwise noted]

Item		Symbol	Condition		min.	typ.	max.	Units	
S u p p l y V o l t a g e		V _{CC}			4.5	5.0	5.5	V	
Low Level Supply Current		I _{CC} L	KI1215	at Beam detecting	—	—	25	mA	
			KI1216	at Light block by object	—	—	25		
High Level Supply Current		I _{CC} H	KI1215	at Light block by object	—	—	25	mA	
			KI1216	at Beam detecting	—	—	25		
Low Level Output Voltage		V _{OL}	KI1215	at Beam detecting, I _{OL} =16mA	—	—	0.4	V	
			KI1216	at Light block by object, I _{OL} =16mA	—	—	0.4		
High Level Output Voltage		V _{OH}	KI1215	at Light block by object	V _{CC} × 0.9	—	—	V	
			KI1216	at Beam detecting	V _{CC} × 0.9	—	—		
Response Time	R i s e	tr				—	1.2	—	μ sec
	F a l l	tf				—	0.05	—	

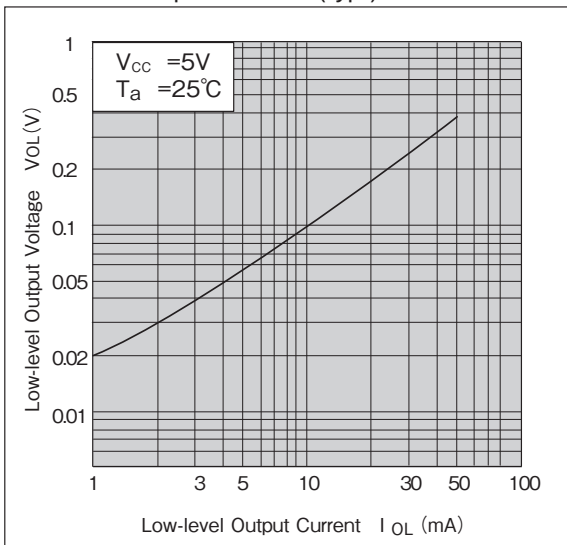
KI1215/1216

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

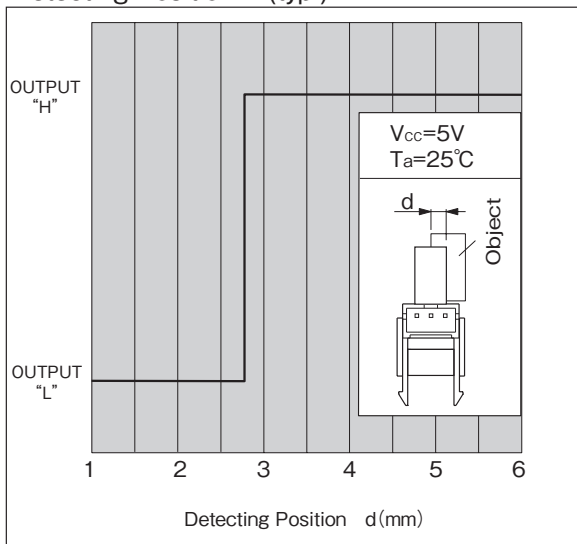
Low-level Output Current vs. Ambient Temperature



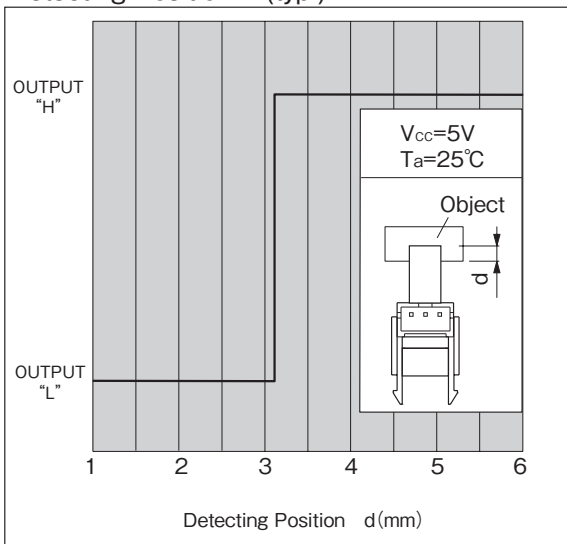
Low-level Output Voltage vs. Low-level Output Current (typ.)



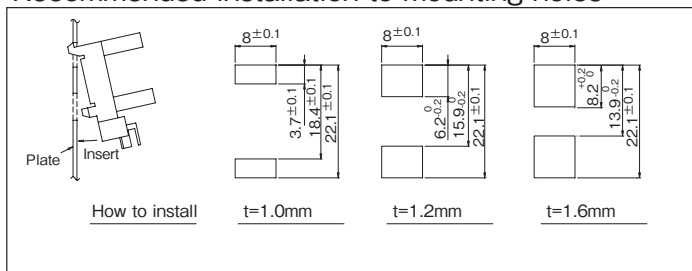
Detecting Position 1 (typ.)



Detecting Position 2 (typ.)



Recommended installation to mounting holes



- We recommend to mount the sensor from pressed surface of plate.
- The actual tolerance should be confirmed after setting of sensor.

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

04.09-1A