

# KI663

Wide Gap • Slit less • Dual Beam Type

## Description

Model **KI663** consists of two sets of Infra Red LED and High sensitive Photo IC(Digital Output), and has slitless plastic housing.

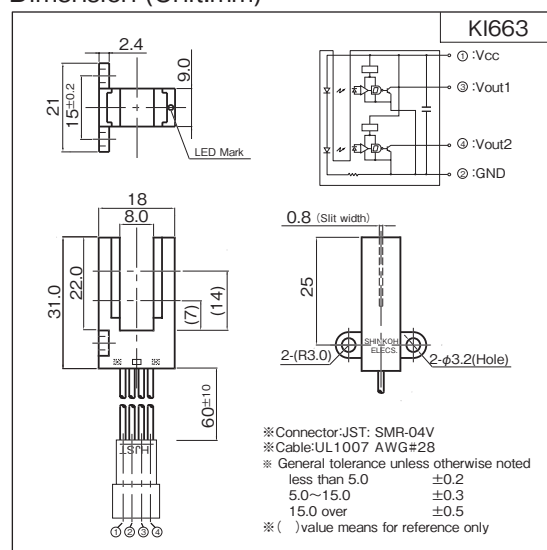
## Feature

- Built-in amplifier.
- Easy removing in dust and Easy maintenance.
- Wide gap-8mm, Deep ditch-22mm.
- For dual beam axis,
  1. Wide detecting area.
  2. Object-bending detection.
  3. 2 Channel (A/B) Rotary encoder.

## Application

- Object passing for Card reader, Bill exchanger.
- Coin-passing for Auto vending machine and Amusement.
- Paper bending detection for O.A. equipment.
- Rotary encoder.

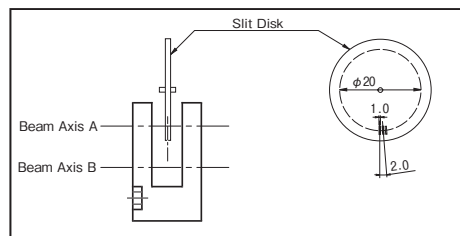
Dimension (Unit:mm)



## Absolute Maximum Ratings

[Ta=25°C Unless otherwise noted]

| Item                     | Symbol           | Rating    | Units |
|--------------------------|------------------|-----------|-------|
| Supply Voltage           | V <sub>CC</sub>  | 6         | V     |
| Low Level Output Current | I <sub>OL</sub>  | 8         | mA    |
| Operating Temperature    | T <sub>opr</sub> | -20 ~ +75 | °C    |
| Storage Temperature      | T <sub>stg</sub> | -30 ~ +80 | °C    |



Note: Each value shown at rotating of slit disk.  
Don't output as DC.

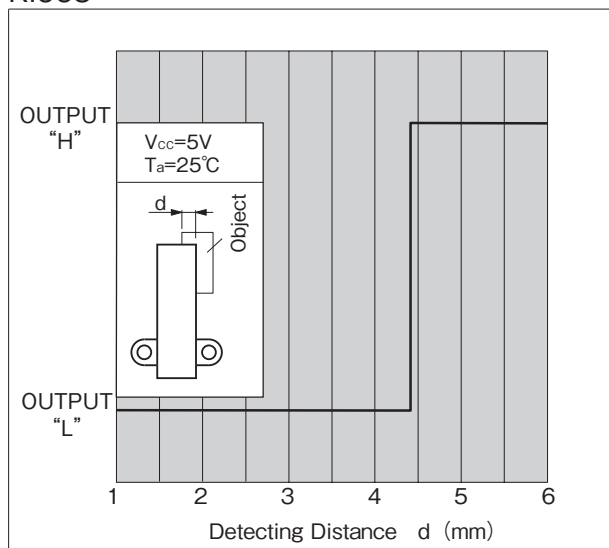
## Electro-Optical Characteristics [V<sub>CC</sub>=5V, Ta=25°C Unless otherwise noted]

| Item                      | Symbol            | Condition                                        | min.                  | typ. | max. | Units |
|---------------------------|-------------------|--------------------------------------------------|-----------------------|------|------|-------|
| Supply Voltage            | V <sub>CC</sub>   |                                                  | 4.5                   | 5.0  | 5.5  | V     |
| Low Level Supply Current  | I <sub>CC</sub> L | at Beam detecting, R <sub>L</sub> =4.7k Ω        | —                     | —    | 45   | mA    |
| High Level Supply Current | I <sub>CC</sub> H | at Light block by object, R <sub>L</sub> =4.7k Ω | —                     | —    | 45   | mA    |
| Low Level Output Voltage  | V <sub>OL</sub>   | at Beam detecting, R <sub>L</sub> =4.7k Ω        | —                     | —    | 0.4  | V     |
| High Level Output Voltage | V <sub>OH</sub>   | at Light block by object, R <sub>L</sub> =4.7k Ω | V <sub>CC</sub> × 0.9 | —    | —    | V     |
| Frequency                 | f                 |                                                  | 3000                  | —    | —    | Hz    |
| Response Time             | R i s e           | R <sub>L</sub> =270 Ω                            | —                     | 0.11 | —    | μ sec |
|                           | F a l l           |                                                  | —                     | 0.02 | —    |       |

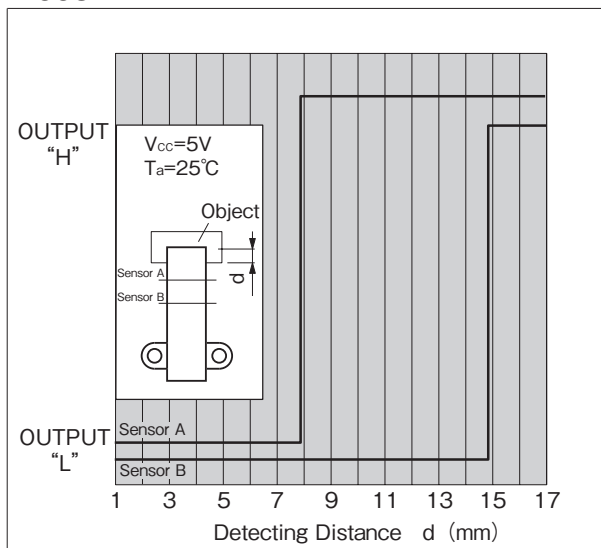
# KI663

## Characteristics

Detecting Position 1 (typ.)  
KI663



Detecting Position 2 (typ.)  
KI663



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

04.09-1A



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