

KI1250,1251

Wide Gap • Slit less Type

Dimension (Unit:mm)

Description

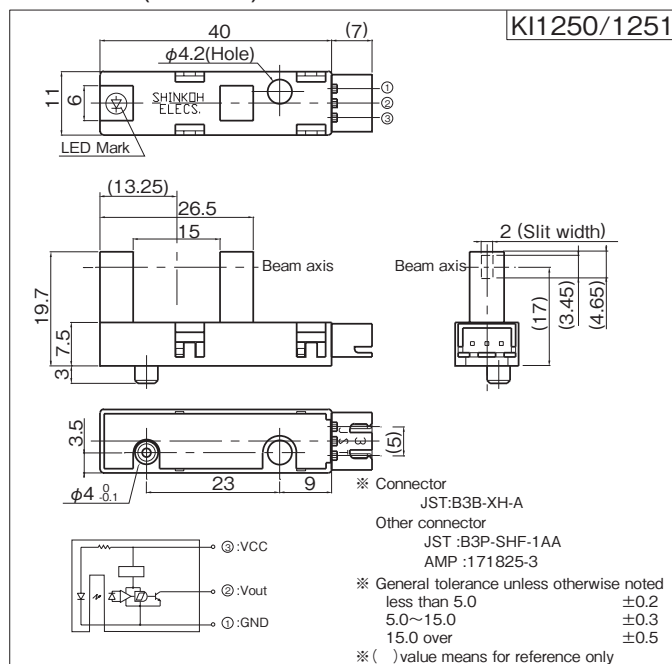
Model **KI1250/1251** consist of an Infra Red LED and a Photo IC.

Feature

- Built-in amplifier, Open collector output type.
- Easy removing in paper-dust.
- Wide gap-15mm, Deep ditch-12.2mm.
- The other model of 13mm wide gap as;
Low level at emitting ... **KI1215**
High level at emitting ... **KI1216**

Application

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



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
KI1250	at Beam detecting Low
KI1251	at Beam detecting High

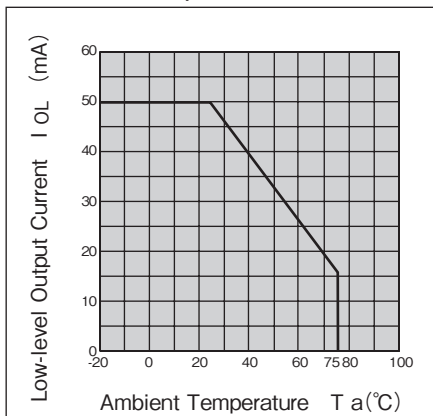
Electro-Optical Characteristics [V_{CC}=5V, Ta=25°C Unless otherwise noted]

Item	Symbol	Condition	min.	typ.	max.	Units
Supply Voltage	V _{CC}		4.5	5.0	5.5	V
Low Level Supply Current	I _{CC}	KI1250 at Beam detecting	—	—	25	mA
		KI1251 at Light block by object	—	—	25	
High Level Supply Current	I _{CC}	KI1250 at Light block by object	—	—	25	mA
		KI1251 at Beam detecting	—	—	25	
Low Level Output Voltage	V _{OL}	KI1250 at Beam detecting, I _{OL} =16mA	—	—	0.4	V
		KI1251 at Light block by object, I _{OL} =16mA	—	—	0.4	
High Level Output Voltage	V _{OH}	KI1250 at Light block by object, R _L =47k Ω	V _{CC} × 0.9	—	—	V
		KI1251 at Beam detecting, R _L =47k Ω	V _{CC} × 0.9	—	—	
Response Time	Rise	KI1250 KI1251 R _L =15k Ω	—	1.2	—	μ sec
	Fall			0.05	—	

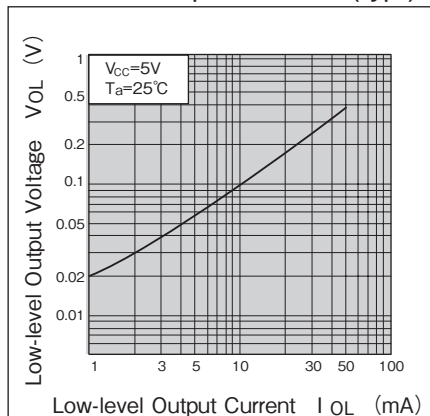
KI1250/1251

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

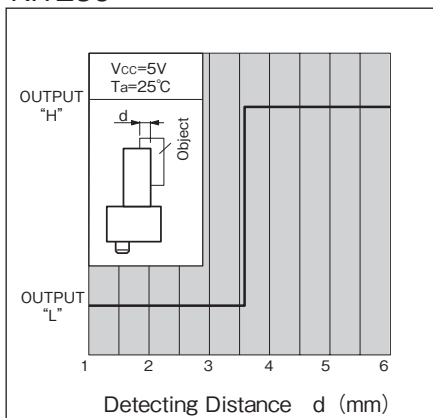
Low-level Output Current vs. Ambient Temperature



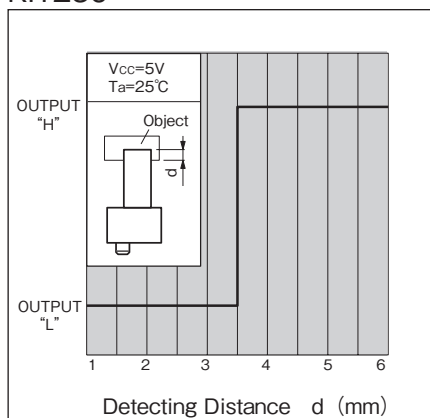
Low-level Output Voltage vs. Low-level Output Current (typ.)



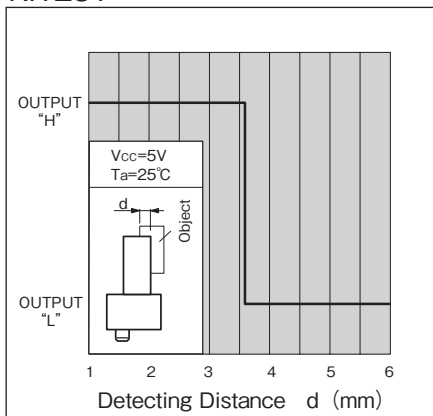
Detecting Position 1 (typ.)
KI1250



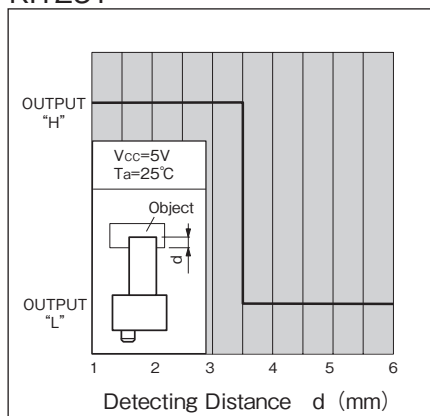
Detecting Position 2 (typ.)
KI1250



Detecting Position 1 (typ.)
KI1251



Detecting Position 2 (typ.)
KI1251



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

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