

Reflective sensors

KODENSHI

HS - 101

HS - 101 are reflection sensors which aim at the human body detection such as ATM. HS - 101 has high resistance to ambient light by using modulated light. HS - 101 are installed with a screw and also can be connected very easily with 3 pin connector.

FEATURES

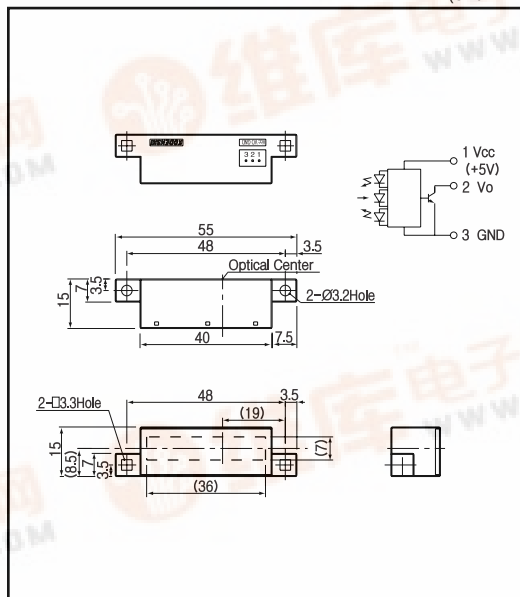
- Compact
- 3pin connector type

APPLICATIONS

- Human body detection for ATM etc

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Supply voltage	V _{CC}	5.5	V
Output voltage *1	V _O	28	V
Low level output current *2	I _{OL}	30	mA
Operating temp. *3*4	T _{opr.}	- 10 + 60	
Storage temp. *3*4	T _{stg.}	- 20 + 70	

*1. C - E voltage for output transistor

*2. Collector current for output transistor

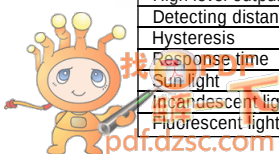
*3. No icebound or dew

*4. The connector shall be inserted or pulled out at normal temperature.

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

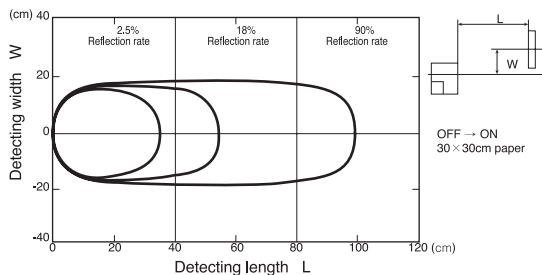
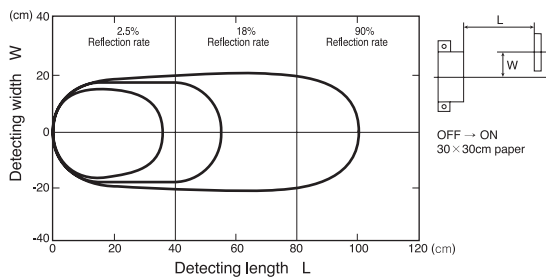
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Supply voltage	V _{CC}		4.75	5	5.25	V
Current consumption	I _{CC}			6.5	12	mA
Low level output voltage	V _{OL}	detecting V _O =5V, R=1kΩ			0.2	V
High level output voltage	V _{OH}	non detecting V _O =5V, R=1kΩ	4.5			V
Detecting distance	L _{HL}	reflection rate 90%, OFF-ON 30cm x 30cm	50	100	150	cm
Hysteresis	E _{V_{HL}} /E _{V_{HL}}	reflection rate 90%, 30cm x 30cm		85		%
Response time	t	reflection rate 90%, L=50cm, 30cm x 30cm		100	200	ms
Sun light	E _{VS}		10,000			lx
Incandescent light	E _{VT}	Luminous intensity at sensing area	3,000			lx
Fluorescent light	E _{VW}		3,000			lx



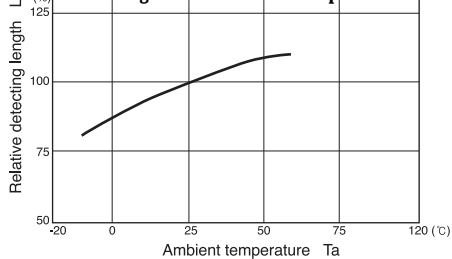
Reflective sensors

HS - 101

Detection area characteristics ($V_{CC}=5V$, $T_a=25^{\circ}C$)



Detection length / Ambient temp. characteristics



Reflection prevention seal is needed for installing a transparent panel to the front of HS-101.
Also, the panel should be adhered to HS-101.

Quality level of HS-101 is set up on the assumption that main application of HS-101 is general electronic equipments, such as electric household products, O.A. equipments and A.V equipments.