

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

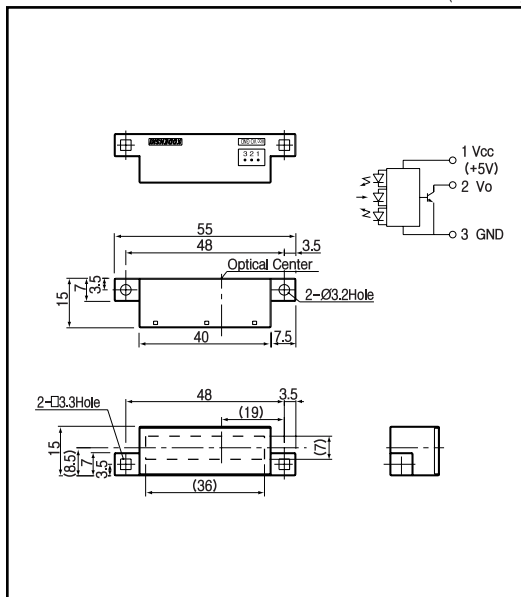
- Compact
- 3pin connector type

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}	Topr.	- 10 +60	
Storage temp. ^{*3*4}	Tstg.	- 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

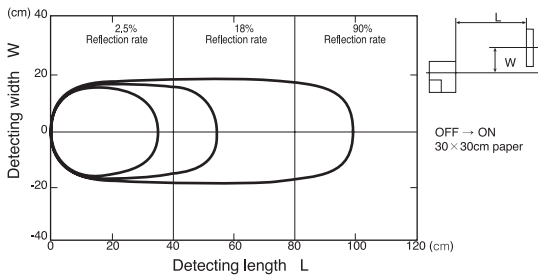
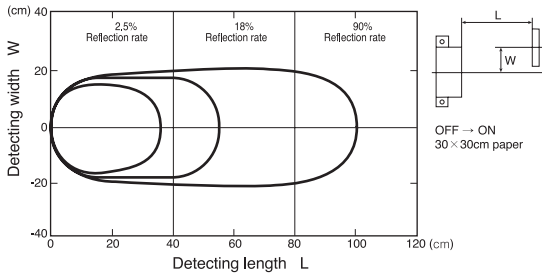
(Ta=25)

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 _L =1k			0.2	V
High level output voltage	V _{OH}	non detecting V _O =5V, R _L =1k	4.5			V
Detecting distance	L _{HL}	reflection rate 90%, OFF ON 30cm x30cm	50	100	150	cm
Hysteresis	E _{VLH} /E _{VHL}	reflection rate 90%, 30cm x30cm		85		%
Response time	t	reflection rate 90%, L=50cm, 30cm x30cm		100	200	ms
Sun light	E _{VS}	Luminous intensity at sensing area	10,000			lx
Incandescent light	E _{VT}		3,000			lx
Fluorescent light	E _{VW}		3,000			lx

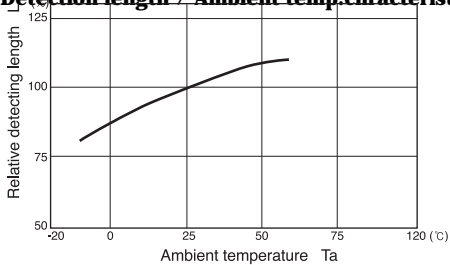
Reflective sensors

HS - 101

Detection area characteristics ($V_{cc}=5V, T_a=25, C$)



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.