

## Description

The KPS1008C photo switch is composed of a modulated infrared emitting diode at the light-emitting side and a modulated photo IC (in which a photo diode, signal processing circuit, constant voltage circuit and modulation circuit are integrated) at the light receiving side.

## Features

- Snap in mount
- Position pin to prevent mis-alignment
- Medium focal distance
- RoHS compliant

## Applications

- Printers
- PPC
- Fax

## Absolute Maximum Ratings (T<sub>a</sub>=25°C, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Supply voltage	V <sub>cc</sub>	-0.5 ~ 5.5	V
Output voltage *1	V <sub>O</sub>	5.5	V
Low level output current *2	I <sub>OL</sub>	30	mA
Power dissipation	P <sub>O</sub>	30	mW
Operating temperature *3,*4	T <sub>opr</sub>	-10 ~ 70	°C
Storage Temperature *3,*4	T <sub>stg</sub>	-20 ~ 80	°C

\*1 : Voltage between collector and emitter of the output transistor.

\*2 : Output transistor collector current.

\*3 : No freezing / dewing.

\*4 : Connect/Disconnect connectors at ambient temperature.

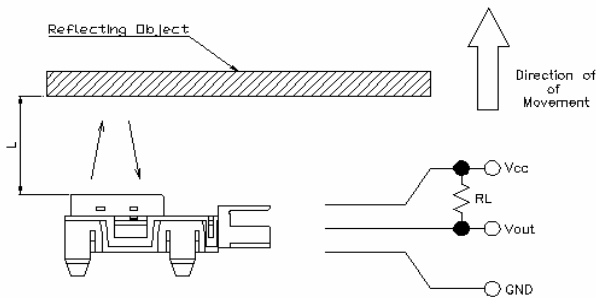
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When using this product, would you please refer to the latest specifications.

## Electrical Characteristics (T<sub>a</sub>=25°C)

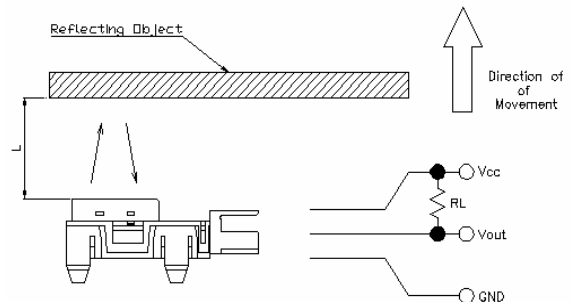
Characteristic		Symbol	Test Condition	Min.	Typ.	Max.	Unit	
Operating supply voltage		V <sub>CC</sub>	-	4.75	-	5.25	V	
Low level output voltage		V <sub>OL</sub>	V <sub>CC</sub> =5V, I <sub>OL</sub> =10 mA, Detecting	-	-	0.4	V	
High level output voltage		V <sub>OH</sub>	V <sub>CC</sub> =5V, R <sub>L</sub> =1 kΩ, Undetecting	4.5	-	-	V	
Low level current consumption		I <sub>CCL</sub>	V <sub>CC</sub> =5V, Detecting	-	12	35	mA	
High level current consumption		I <sub>CCH</sub>	V <sub>CC</sub> =5V, Undetecting	-	12	35	mA	
Minimum detection distance *5		L <sub>DS</sub>	OD:0.05	-	-	7	mm	
			OD:1.16	-	-	10	mm	
Maximum detection distance *6		L <sub>DL</sub>	V <sub>CC</sub> =5V R <sub>L</sub> =1 kΩ	OD:0.05	25	-	-	mm
				OD:1.16	16	-	-	mm
Non detection distance *5		L <sub>NS</sub>	OD:0.05	-	-	50	mm	
Non detection area *7		L <sub>NA</sub>	POM(White)	-	-	Φ10	mm	
Response time	L→H propagation	t <sub>PLH</sub>	V <sub>CC</sub> =5V, R <sub>L</sub> =1 kΩ *8	-	-	0.5	ms	
	H→L propagation	t <sub>PHL</sub>		-	-	0.5	ms	
Disturbance light *9		Ev	V <sub>CC</sub> =5V, R <sub>L</sub> =1 kΩ	3000	-	-	Lx	

\*10 : OHP sheet : PPC-E

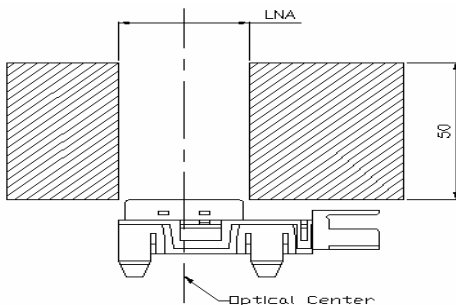
\*5 : Minimum detection distance and non-detection distance measuring method.



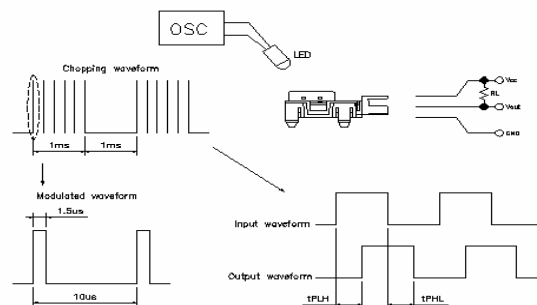
\*6 : Maximum detection distance measuring method.



\*7 : Non detecting area.

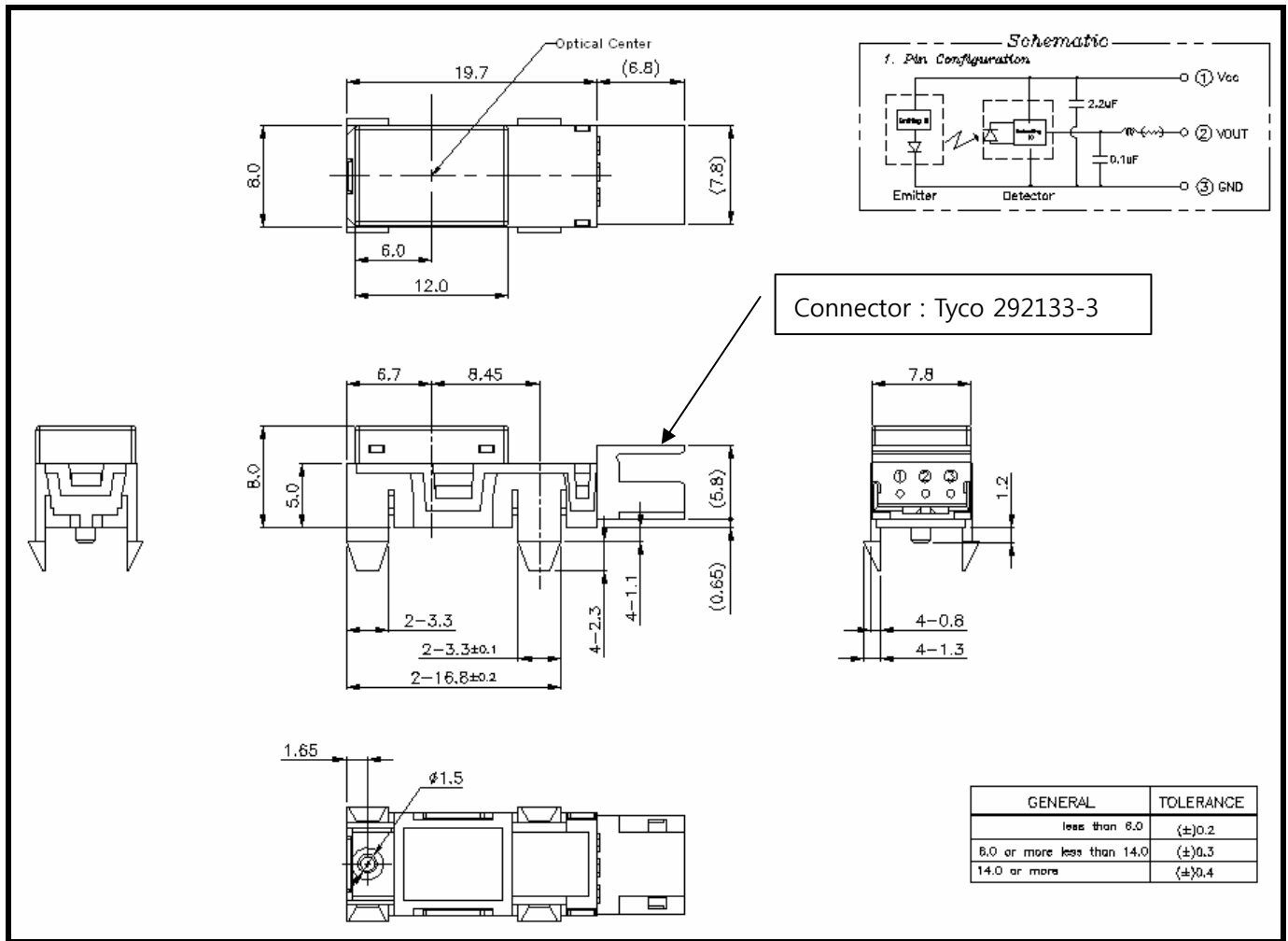


\*8 : Response time measuring method.



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## Package Outline Dimensions



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