



AUK CORP.

Paper Sensor

KPS1003C-

Description

The KPS1003C 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
- Short focal distance
- RoHS compliant

Applications

- Printers
- PPC
- Fax

Absolute Maximum Ratings (Ta=25°C, Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit	
Supply voltage	V _{cc}	-0.5 ~ 5.5	V	
Output voltage •1	V _o	5.5	V	
Low level output current •2	IOL	30	mA	
Power dissipation	Po	30	mW	
Operating temperature +3,4	T _{opr}	-10 ~ 70	°C	
Storage Temperature *3,*4	T _{stg}	-20 ~ 80	°C	

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*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.

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

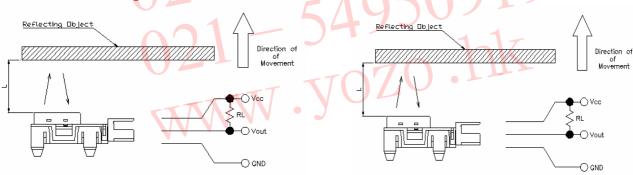


Electrical Characteristics (Ta=25°C)

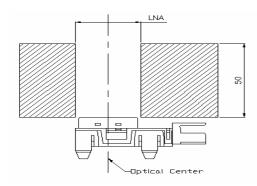
Cha	aracteristic	Symbol	Test Condition		Min.	Тур.	Max.	Unit
Operatin	g supply voltage	V _{cc}	-		4.75	-	5.25	V
Low leve	el output voltage	V_{OL}	V_{CC} =5V, I_{OL} =10 mA, Detecting		-	-	0.4	V
High leve	el output voltage	V_{OH}	V_{CC} =5V, R _L =1 k _Ω , Undetecting		4.5	-	-	V
Low level c	urrent consumption	I _{CCL}	V_{CC} =5V, Detecting		-	12	35	mA
High level c	urrent consumption	I _{CCH}	V_{cc} =5V, Undetecting		-	12	35	mA
Minimum detection distance *5		L _{DS}	V _{CC} =5V R _L =1 kΩ	OD:0.05	-	-	1	mm
				OD:1.16	-	-	3	mm
Maximum detection distance *6		L _{DL}		OD:0.05	10	-	-	mm
				OD:1.16	7	-	-	mm
Non detection distance *5		L _{NS}		OD:0.05	-	-	27	mm
Non detection area ^{*7}		L _{NA}		POM(White)	-	-	Ф10	mm
Response time	L→H propagation	t _{PLH}	V _{cc} =5V, R _L =1 kΩ ^{*8}		-	-	0.5	ms
	H→L propagation	t _{PHL}				-	0.5	ms
Disturbance light *9		Ev	V _{cc} =5V, R _L =1 kΩ		3000	J -	-	Lx

*10 : OHP sheet : PPC-E

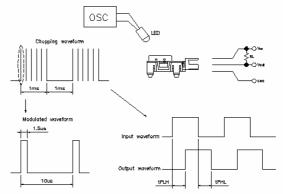
*5 : Minimum detection distance and non-detection *6 : Maximum detection distance measuring method.



*7 : Non detecting area.



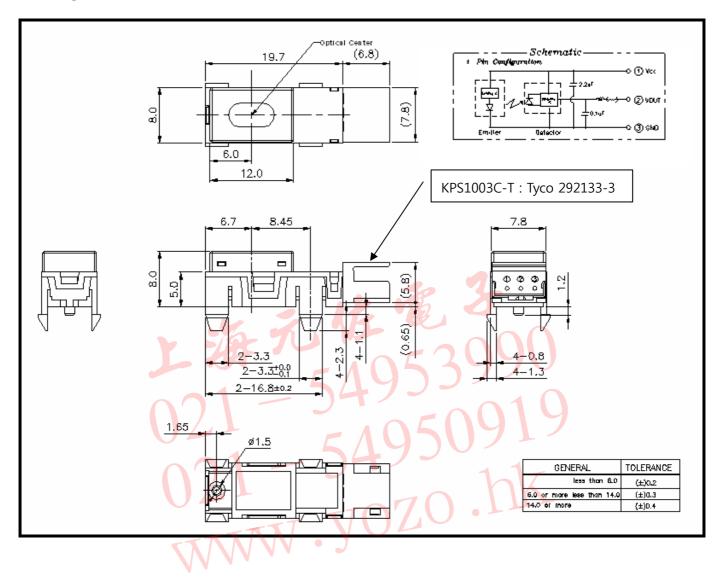
*8 : Response time measuring method.



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Package Outline Dimensions



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