NEW PRODUCT

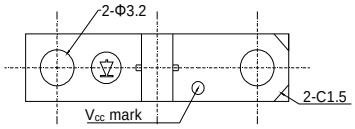
KODENSHI AUK

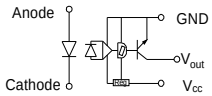
SIC301D
Photo Interrupter

The SIC301D photointerrupter combines high output GaAs IRED with Photo IC. The sensor makes possible easy development of object detecting systems with high performance, high reliability and small equipment size.

Dimensions

Unit:mm





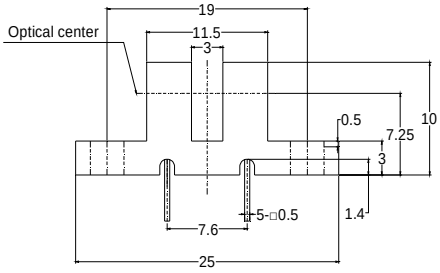
Top View

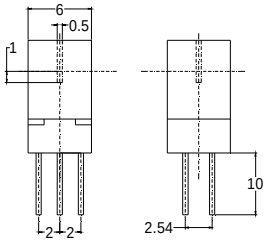
Features

- PCB direct mount type
- GAP:3mm
- RoHS Compliance

Applications

- Copiers
- Facsimiles
- Auto stampers
- Ticket vending machines





* General Tolerance(±0.2mm)

Maximum Ratings

(Ta=25℃)

Item		Symbol	Ratings	Unit
Input	Power dissipation	P_D	100	mW
	Forward current	I_F	60	mA
	Reverse voltage	V_R	5	V
	Pulse forward current *1	I_{FP}	1	A
Output	Supply voltage	V_{CC}	17	V
	Low level output current	I_{OL}	30	mA
	Power dissipation	P_O	200	mW
Operating temperature *2		$T_{opr.}$	-20～+85	°C
Storage tempertature *2		$T_{stg.}$	-30～+85	°C
Soldering tempertature *3		$T_{sol.}$	260	°C

* 1.Pulse width:tw≤100μs period:T=10ms

* 2.No icebound or dew

* 3.For MAX.3 secinds at the position of 1.2mm from the resin edge.

Elector-Optical Characteristics

(Ta=25℃)

Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	V_F	I_F=20mA	-	1.2	1.4	V
	Reverse current	I_R	V_R=5V	-	-	10	μA
	Peak wavelength	λ_P	I_F=20mA	-	940	-	nm
Output	Operating supply voltage	V_{cc}	-	4.5	-	16.5	V
	Low level output voltage	V_{ol}	V_{CC}=5V,I_F=0mA,I_{oL}=16mA	-	0.3	0.4	V
	High level output voltage	V_{oH}	V_{CC}=5V,I_F=20mA,R_L=10KΩ	4.5	-	-	V
	Low level supply current	I_{ccl}	V_{CC}=5V,I_F=0mA,R_L=10KΩ	-	3	10	mA
	High level supply current	I_{CCH}	V_{CC}=5V,I_F=20mA,R_L=10KΩ	-	3	10	mA
Transmission	L→H threshoid input current *4	I_{FHL} / I_{FLH}	V_{CC}=5V,R_L=10KΩ	-	5	12	mA
	Hysteresis *5	I_{FLH}	V_{CC}=5V,R_L=10KΩ	0.5	0.8	0.95	-
	L→H propagation time	t_{PLH}	V_{CC}=5V,I_F=18mA,R_L=3.3KΩ	-	3	-	μs
	H→L propagation time	t_{PHL}		-	1	-	μs
Rise time		tr		-	0.6	-	μs
Fall time		tf		-	0.02	-	μs

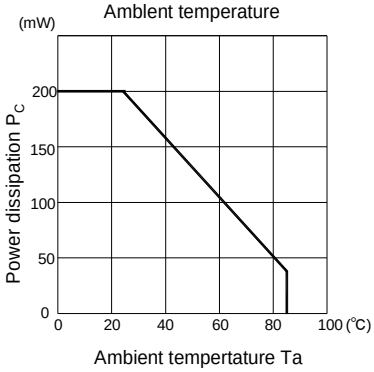
* 4.I_{FLH} represents forward current when outpou changes from low to high.

* 5.I_{FLH} represents forward current when outpou changes from high to low.

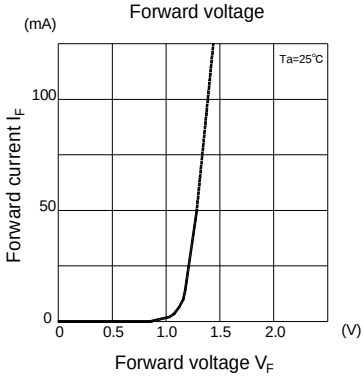
Photo Interrupter

SIC301D

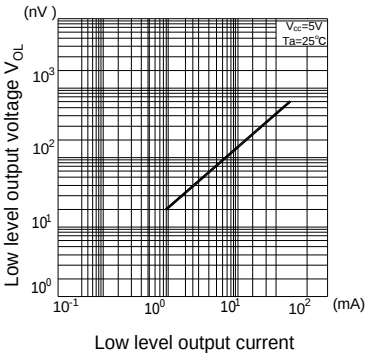
Collector power dissipation V_s.
Ambient temperature



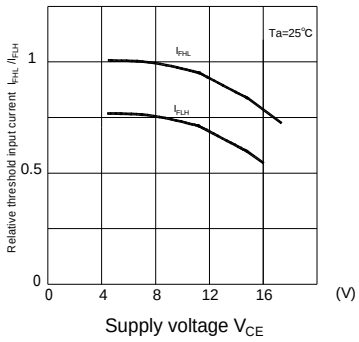
Forward current V_s.
Forward voltage



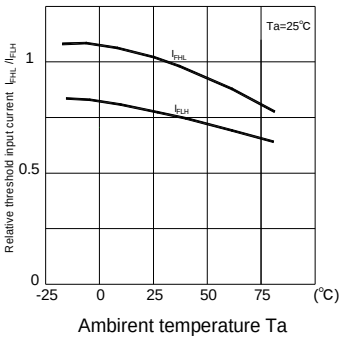
Low level output voltage V_s.
Low level output current



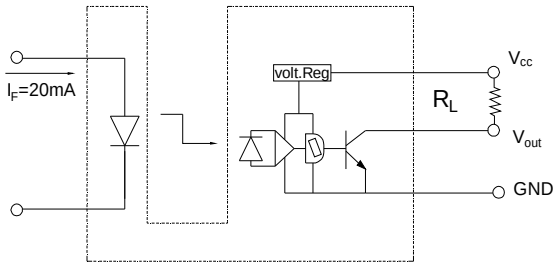
Relative threshold input current V_s.
Supply voltage



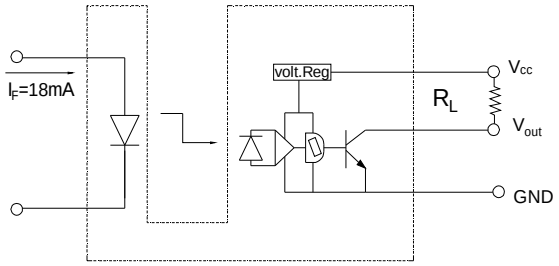
Relative threshold input current V_s.
Ambient temperature

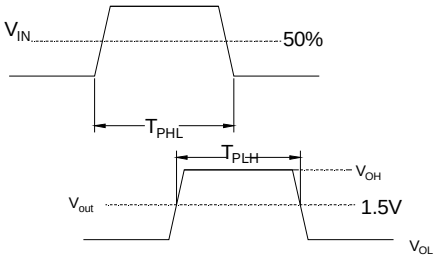


Measurement of high output voltage



Measurement of propagation time





Packing Specification

1.Fixed quantity (max 400pcs) of the products are packed into plastic bag(300*380)

2.Ten bags of the products are put into #2 box(max 4000pcs)

3. Two #2 Boxes are put into #3 Box(max 8000pcs)

4. Packing slip is pasted on #3 box.