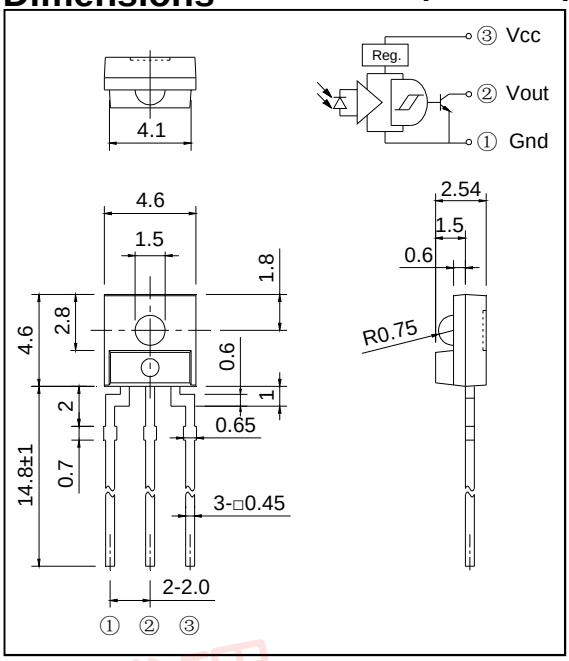
NEW PRODUCT

KODENSHI AUK

SIC553-04
Photo IC

The SIC553-04 is a digital-output detector which incorprates a photodiode with signal processing ciruit(amplifier, Schmitt trigger,voltage regulator).

Dimensions (Unit:mm)



Features

- Built-in Schmitt trigger circuit
- Open-Collector output
- Wide Vcc range
- Low level output without signal

Application

- Paper sensors
- Optical detectors

MAXIMUM RATINGS (Ta= 25℃)

Item	Symbol	Rating	Unit
Supply voltage	Vcc	17	V
Low level	IoL	30	mA
Out transistor power dissipation	PD	200	mW
Operating Temperature	Topr.	-25～+85	℃
Storage Temperature	Tstg.	-40～+100	℃
Soldering temperature *1	Tsol.	260	℃

Note : *1. For MAX.5 seconds at the position of 2mm from the package

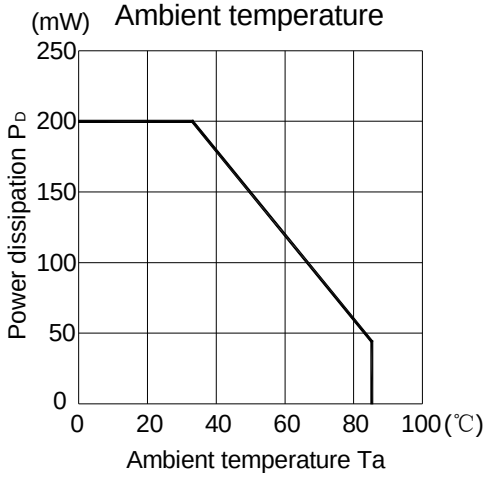
ELECTRO- OPTICAL CHARACTERISTICS (Ta= 25℃)

Items		Symbol	Condition	Min.	Typ.	Max.	Unit
Supply voltage		V_{CC}	-	4.5		17	V
High level supply current		I_{CCH}	E_V=200Lux*2	-	3	6	mA
Low level supply current		I_{CCL}	E_V=0Lux	-	3	6	mA
High level output voltage		V_{OH}	RL=10kΩ, Vup=5V E_V=200Lux*2	4.5	-	-	V
Low level output voltage		V_{OL}	I_{OL}=16mA , E_V=0lux	-	-	0.4	V
L→H Threshold illuminance		E_{VLH}	*2	-	-	65	μW
H→L Threshold illuminance		E_{VHL}	*2	8	-	60	μW
Hysteresis		P_{PLH}/P_{PLH}	-	-	-	0.95	-
Peak wavelength		λ_P	-	-	900	-	nm
Switching speed	L→H propagation time	t_{PLH}	E_V=200Lux*2 R_L=280Ω	-	2	6	μS
	H→L propagation time	t_{PHL}		-	3	9	μS
	Rise time	tr		-	0.1	0.5	μS
	Fall time	tf		-	0.05	0.5	μS

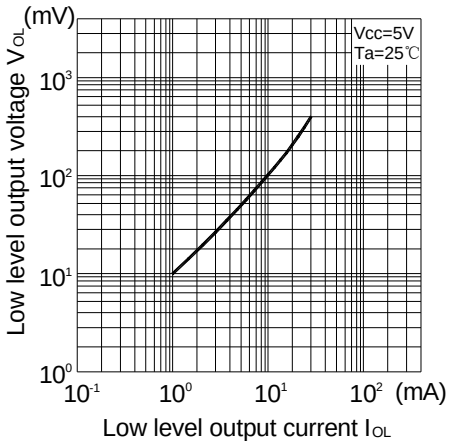
Note : *2. Irradiance by CIE standard light source A (2856K tungsten lamp)

SIC553-04

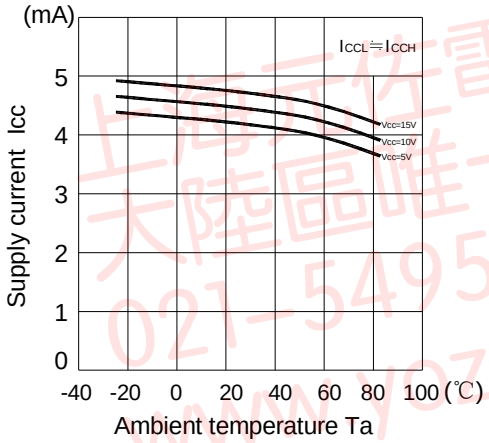
Power dissipation Vs.
Ambient temperature



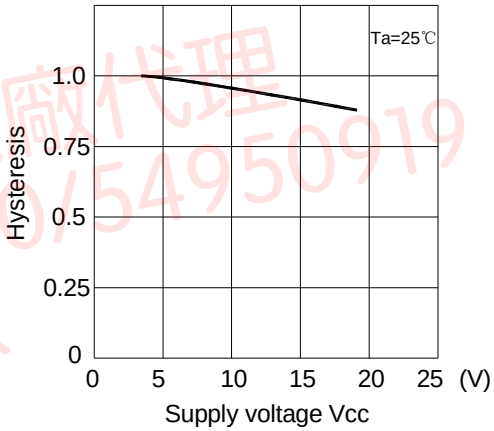
Low level output Vs.
Low level output current



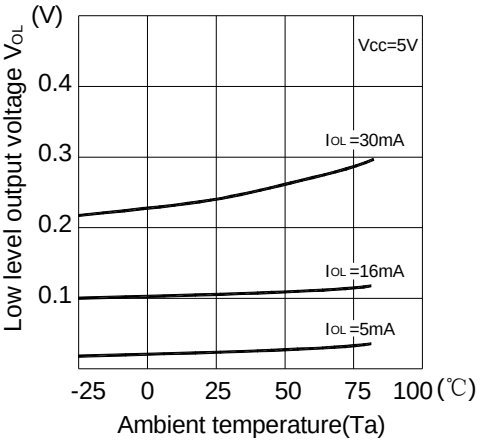
Supply current Vs.
Ambient temperature

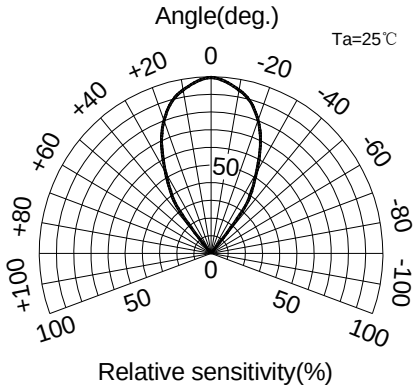


Hystersis Vs.
Supply voltage



Low level output voltage Vs.
Ambient temperature





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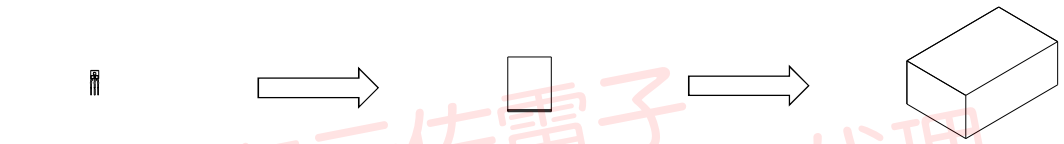
Packing Specification

1.Fixed quantity (1000pcs) of the products are packed into plastic bag

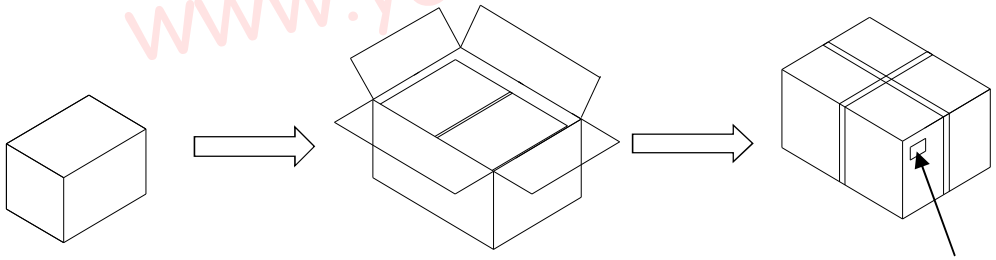
2.Five bags of the products are put into #1 box

3. Ten #1 boxes are put into #2 box and two #2 boxes are put into #3 box(max 100,000pcs)

4. Packing slit is pasted on the out box



SIC553-04 (1000pcs)　　plastic bag * 5　　#1 box * 10



#2 box * 2　　#3 box　　packing slit