

## KDT5001A

The KDT5001A is high sensitivity silicon photo transistor which converts light to electrical signal. This photo transistor is both COB package and easy to mount.

### Features

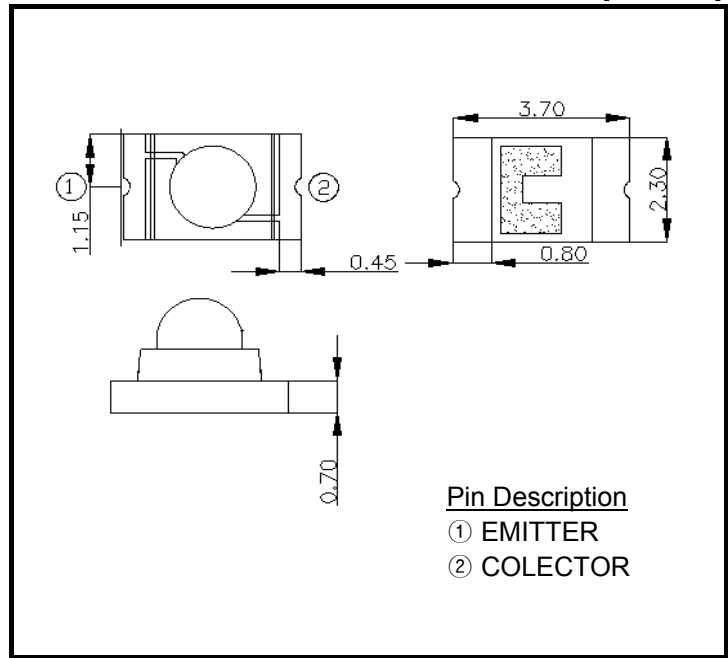
- Highly sensitive photo transistor
- Chip On Board package.
- High speed response.

### Applications

- AV Instruments
- Touch panels for ATM & FA equipments
- Optical counter

### Dimensions

[Unit : mm]



### Absolute Maximum Ratings

[T<sub>A</sub> = 25°C]

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Collector Voltage	V <sub>ECO</sub>	5	V
Collector Current	I <sub>C</sub>	20	mA
Collector Power Dissipation	P <sub>C</sub>	75	mW
Operating Temperature	T <sub>opr.</sub>	-5~+50	°C
Storage Temperature	T <sub>stg.</sub>	-20~+80	°C
Soldering Temperature*1	T <sub>sol</sub>	240	°C

\*1. Test Condition : t ≤ 3s

### ELECTRO- OPTICAL CHARACTERISTICS

Description	Symbol	Condition	Min.	Typ.	Max.	Unit
Dark Current	I <sub>CEO</sub>	V <sub>CE</sub> =10V, E <sub>E</sub> =0	-	-	100	nA
Photo Current	I <sub>PCE</sub>	V <sub>CE</sub> =5V, E <sub>E</sub> =0.5mW/cm <sup>2</sup> , λ <sub>PK</sub> =640nm	1.2	-	2.4	mA
Spectral Sensitivity	λ		500~1050			nm
Peak wavelength	λ <sub>p</sub>	V <sub>R</sub> =0V		880		nm
Viewing Angle	2Θ <sub>1/2</sub>		20		40	deg.
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =100 μA, E <sub>E</sub> =0.5mW/cm <sup>2</sup> , λ <sub>PK</sub> =640nm	-	-	200	mV

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**DYNAMIC CHARACTERISTICS**

