# SIS-ED05 \& SIS-PT05 Photo Interrupter 

## DIMENSIONS

A modulative emitting diode and a modulative detecting photo IC with connector has been put ineach package. The use of the emitter and detector as a pair enables it to work as a penetrative type photo- sensor of approximately 100 cm (Can be practically used as a reflective type sensor). Can be used as a paper sensor due to easy equipping and its high anti- dust factor.

## Features

-Anti-visible rays due to visible ray cut resin for detector type
-Connector type(JAE IL-Y type)
-Dust proof


## Applications

-ATM
-Auto stampers
-Card readers/writers

- Optical switches

| MAXIMUM RATINGS |  | $\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right)$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Item | Symbol | Ratings | Unit |
| Input | Supply voltage | $\mathrm{V}_{\mathrm{cc}}$ | 7 | V |
| Output | Supply voltage | $\mathrm{V}_{\mathrm{cc}}$ | 13.2 | V |
|  | Low level output current | $\mathrm{l}_{\mathrm{O}}$ | 30 | mA |
|  | Power dissipation | $\mathrm{P}_{\mathrm{D}}$ | 100 | mW |
| Operating temperature* ${ }^{* 1}$ |  | Topr. | $-10 \sim+60$ | ${ }^{\circ} \mathrm{C}$ |
| Storage tempertature ${ }^{* 1}$ |  | Tstg. | $-20 \sim+80$ | ${ }^{\circ} \mathrm{C}$ |

*1. No icebound or dew

Elector-Optical Characteristics
$\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right)$

| Parameter |  | Symbol | Conditions | Min. | Typ. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Emitter | Supply voltage | $\mathrm{V}_{\text {c }}$ | - | 4.75 | - | 5.25 | V |
|  | Current consumption | $\mathrm{I}_{\mathrm{cc}}$ | $\mathrm{V}_{\mathrm{CC}}=5 \mathrm{~V}$ | - | 15 | 30 | uA |
|  | Peak wavelength | $\lambda_{P}$ | $\mathrm{V}_{\mathrm{CC}}=5 \mathrm{~V}$ | - | 830 | - | nm |
|  | Half angle | $\Delta \theta$ | - | - | $\pm 5$ | - | deg. |
| Detector | Supply voltage | $\mathrm{V}_{\mathrm{Cc}}$ | - | 4.5 | - | 5.25 | V |
|  | Low level output voltage | $\mathrm{V}_{\text {OL }}$ | $\mathrm{Vcc}=5 \mathrm{~V}, \mathrm{I}_{\mathrm{OL}}=16 \mathrm{~mA}$, Shading | - | - | 0.4 | V |
|  | High level output voltage | $\mathrm{V}_{\mathrm{OH}}$ | Vcc=5V, $\mathrm{R}_{\mathrm{L}}=10 \mathrm{k} \Omega$, Non-Shading | 4 | - | - | V |
|  | Current consumption | $\mathrm{I}_{\mathrm{CC}}$ | $\mathrm{Vcc}=5 \mathrm{~V}$ | - | 5 | 10 | mA |
|  | Half angle | $\Delta \theta$ |  | - | $\pm 5$ | - | deg. |
| Combin ation | Detecting distance | L | $\mathrm{Vcc}=5 \mathrm{~V}$ | 100 | 200 | 850 | cm |
|  | Hysteresis | $\mathrm{I}_{\text {FHL }} / \mathrm{I}_{\text {FLH }}$ | Vcc=5V | - | 0.9 | - | - |
|  | $\mathrm{L} \rightarrow \mathrm{H}$ propagation time | $\mathrm{t}_{\text {PLH }}$ | $\begin{gathered} \mathrm{Vcc}=5 \mathrm{~V}, \mathrm{~L}=100 \mathrm{~cm} \\ \mathrm{R}_{\mathrm{L}}=3.3 \mathrm{k} \Omega \end{gathered}$ | - | - | 0.5 | msec |
|  | $\mathrm{H} \rightarrow \mathrm{L}$ propagation time | $\mathrm{t}_{\text {PHL }}$ |  | - | - | 0.5 | msec |

[^0]
[^0]:    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.

