# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# Photo Transistor

#### Product No: MTD8600T4-T

### Peak Sensitivity Wavelength: 880nm

The MTD8600T4-T is a photo transistor in a TO-18 metal can flat top package. It is well suited for high reliability and high sensitivity applications.

#### FEATURES

- > High Reliability in Demanding Environments
- > Wide Angular Response
- > Metal Can Package
- > Compact

#### APPLICATIONS

- > Optical Switches
- > Optical Sensors
- > Fiber Optical Communications
- > Optical Detectors



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### Absolute Maximum Ratings (Ta=25°C)

| ITEMS                        | SYMBOL | RATINGS    | UNIT | kad free ROHS  |
|------------------------------|--------|------------|------|--|
| Collector-Emitter Voltage    | Vceo   | 30         | V    |  |
| Collector-Base Voltage       | Vcbo   | 30         | V    |  |
| Emitter-Base Voltage         | Vebo   | 5          | V    |  |
| Emitter-Collector Voltage    | Veco   | 5          | V    |  |
| Collector Current            | lc     | 50         | mA   |  |
| Collector Power Dissipation  | Pc     | 250        | mW   |  |
| Operating Temperature Range  | Topr   | -30 ~ +100 | °C   |  |
| Storage Temperature Range    | Tstg   | -40 ~ +125 | °C   |  |
| Junction Temperature         | Tj     | 125        | °C   |  |
| Lead Soldering Temperature*1 | Tls    | 260        | °C   | *1: Time 5 Sec max, Position: Up to 3mm from the body. |

## Electrical & Optical Characteristics (Ta = 25°C)

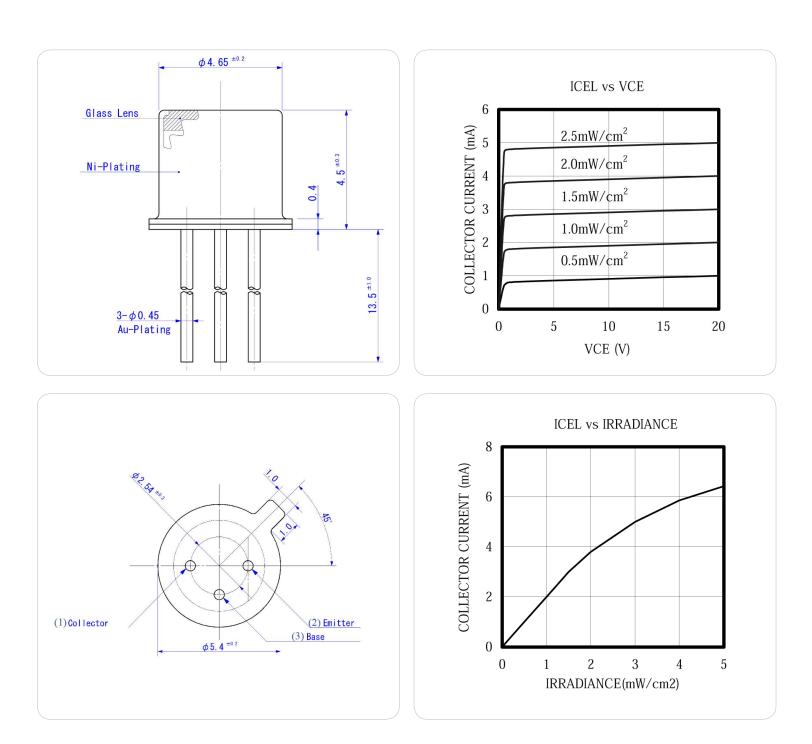
| ITEMS                       | SYMBOL   | CONDITIONS                          | MIN | ТҮР      | MAX | UNIT |
|-----------------------------|----------|-------------------------------------|-----|----------|-----|------|
| Collector Emitter Current   | Icel     | Vce=20V, Ee=0.5mW/cm2 *1            |     | 1.0      |     | mA   |
| Collector Dark Current      | lceo     | Vce=20V, Ee=0mW/cm <sup>2</sup> *1  |     |          | 100 | nA   |
| C-E Saturation Voltage      | VCE(sat) | lc=0.2mA, Ee=5mW/cm <sup>2</sup> *1 |     | 0.2      |     | V    |
| Spectral Sensitivity        | λ        |                                     |     | 400~1100 |     | nm   |
| Peak Sensitivity Wavelength | λp       |                                     |     | 880      |     | nm   |
| Switching Time (Rise Time)  | Tr       | RL=100Ω, Vcc=5V, Ic=0.5mA           |     | 10.0     |     | μS   |
| Switching Time (Fall Time)  | Tf       | RL=100Ω, Vcc=5V, Ic=0.5mA           |     | 10.0     |     | μS   |
| Angular Response            | θ        |                                     |     | ±55      |     | deg  |
|                             |          |                                     |     |          |     |      |

\*1: Color Temperature=2870°K Stardard Tungsten Lamp.

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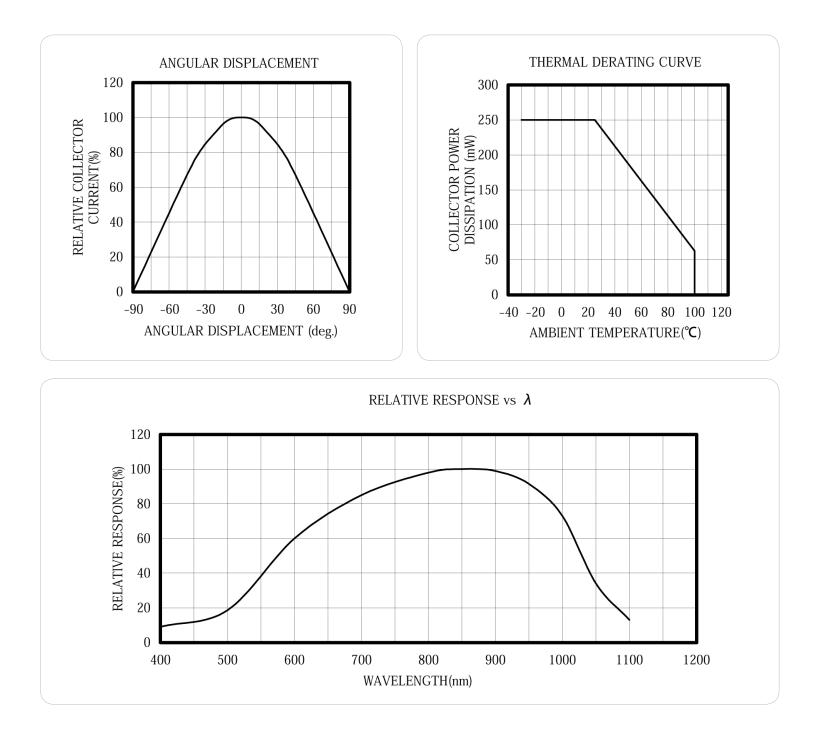


Unit: mm, Tolerance: ±0.2

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The information contained herein is subject to change without notice.

2011-07-19

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