Marktech Optoelectronics

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

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
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	Ic	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

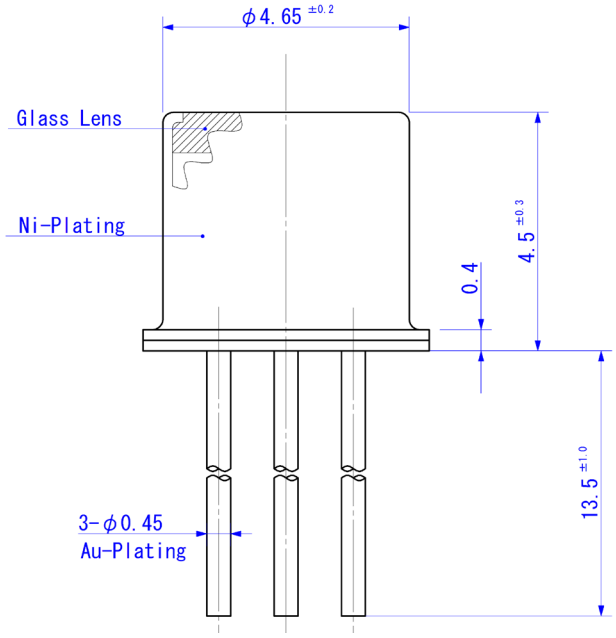
*1: Time 5 Sec max, Position: Up to 3mm from the body.

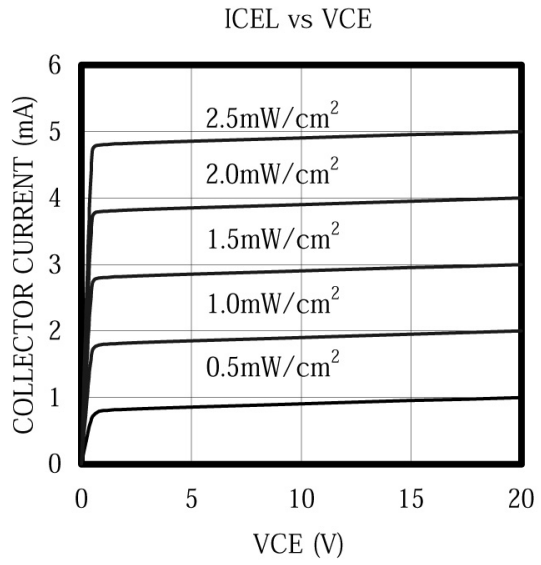
Electrical & Optical Characteristics (Ta = 25°C)

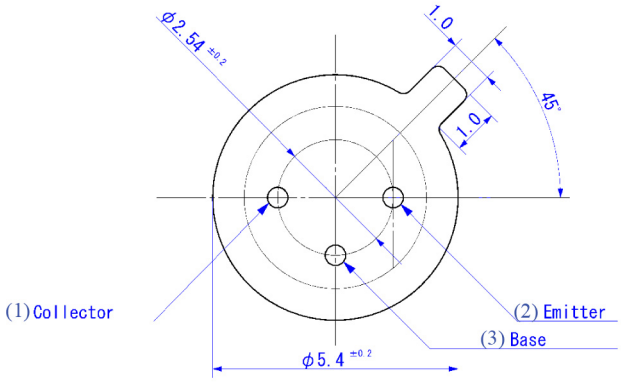
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Current	Icel	Vce=20V, Ee=0.5mW/cm^2 *1	--	1.0	--	mA
Collector Dark Current	Iceo	Vce=20V, Ee=0mW/cm^2 *1	--	--	100	nA
C-E Saturation Voltage	VCE(sat)	Ic=0.2mA, Ee=5mW/cm^2 *1	--	0.2	--	V
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity 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

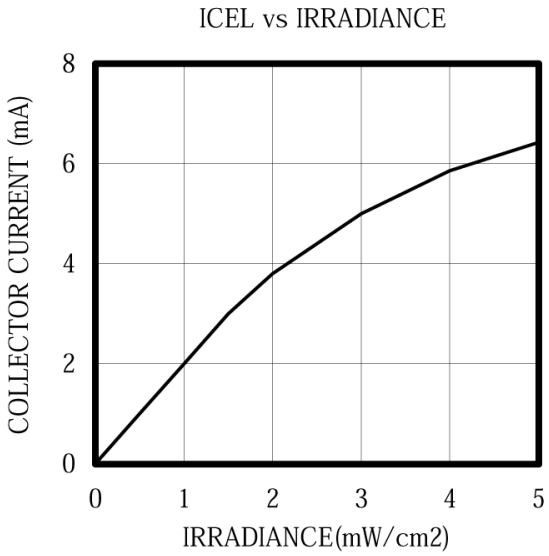
*1: Color Temperature=2870°K Stardard Tungsten Lamp.

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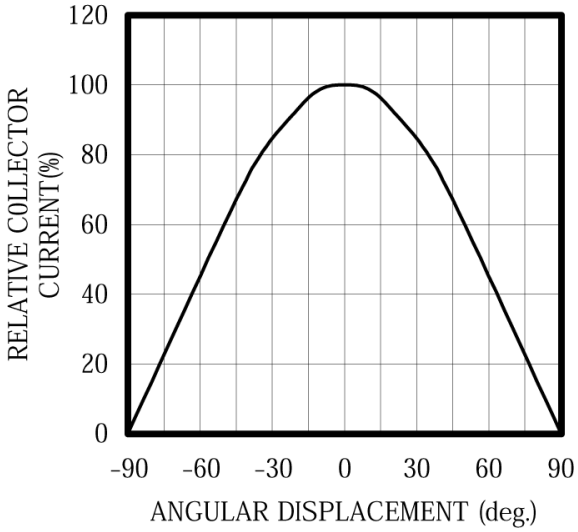




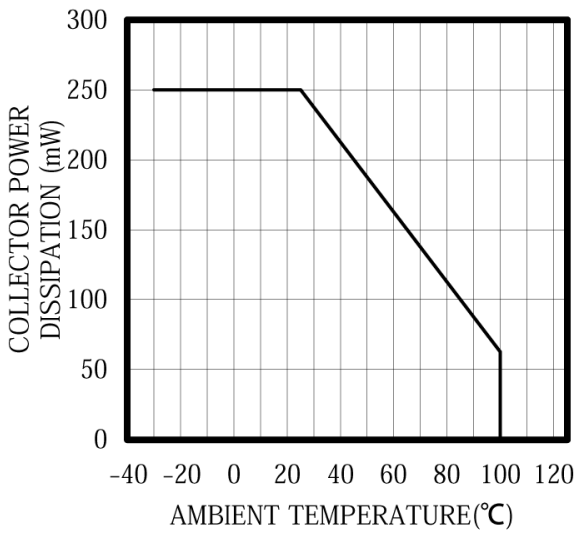
Unit: mm, Tolerance: ±0.2

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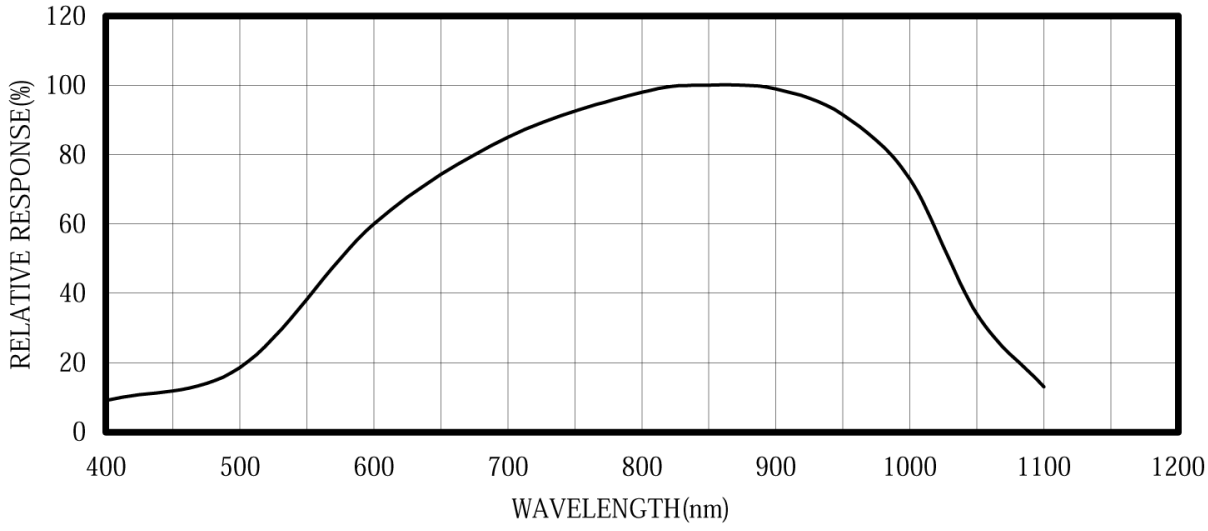
ANGULAR DISPLACEMENT



THERMAL DERATING CURVE



RELATIVE RESPONSE vs λ



The information contained herein is subject to change without notice.

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