

Peak Sensitivity Wavelength: 880nm

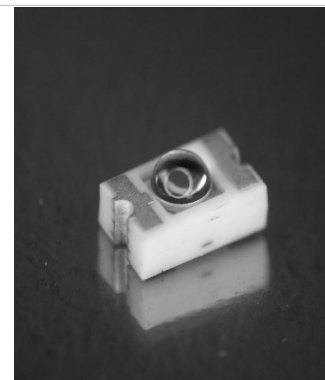
The MTD6000CP-T is a photo transistor in a SMD package. It is well suited for high reliability and high sensitivity applications.

FEATURES

- > High Reliability in Demanding Environments
- > 3.5 x 2.2 SMD Package
- > Narrow Angular Response

APPLICATIONS

- > Optical Switches
- > Edge Sensing
- > Smoke Detectors



Absolute Maximum Ratings (Ta=25°C)

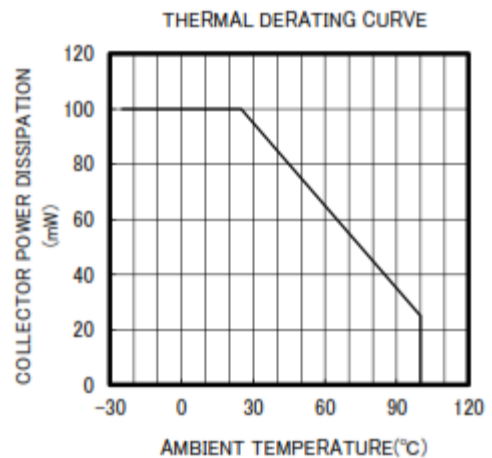
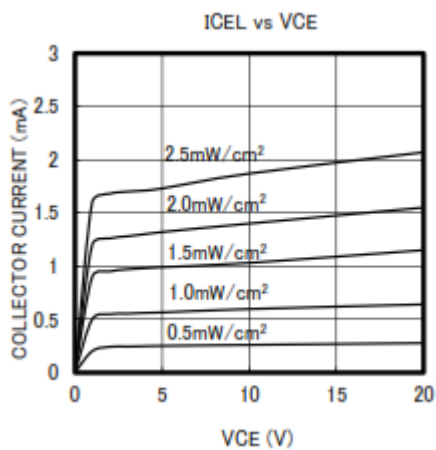
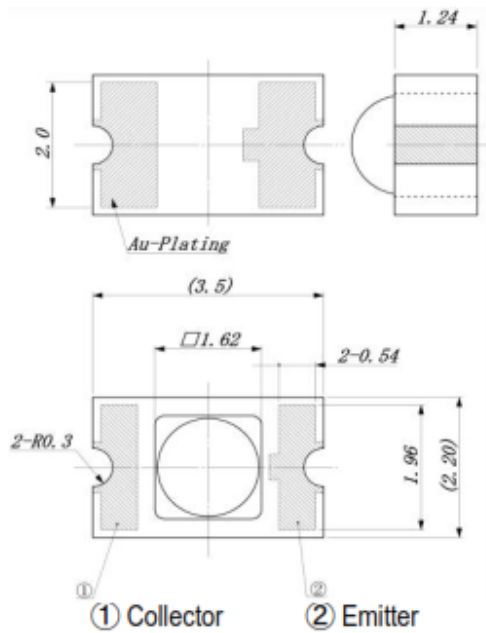


ITEMS	SYMBOL	RATINGS	UNIT
Collector-Emitter Voltage	V _{ceo}	30	V
Emitter-Collector Voltage	V _{eco}	5	V
Collector Current	I _c	20	mA
Collector Power Dissipation	P _c	100	mW
Operating Temperature Range	T _{opr}	-25 ~ +100	°C
Storage Temperature Range	T _{stg}	-30 ~ +125	°C
Soldering Temperature	T _{ls}	260	°C

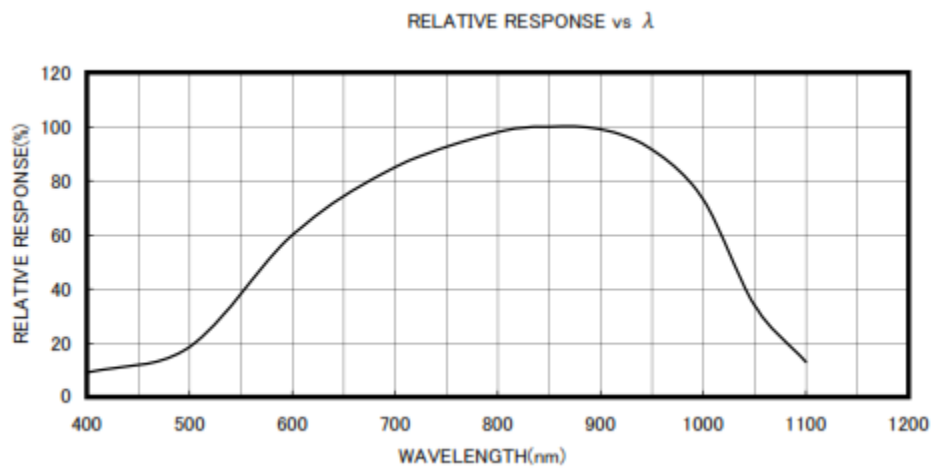
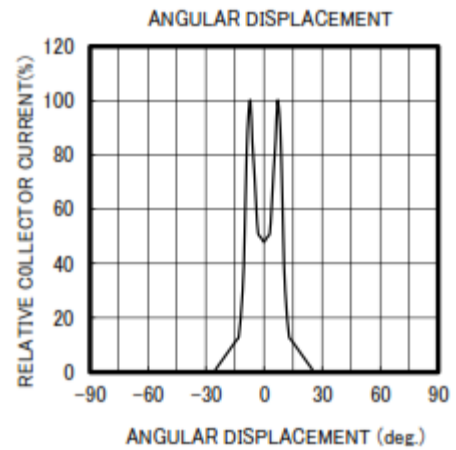
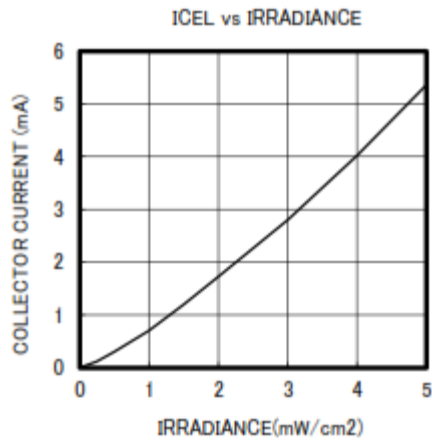
Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Current	I _{cel}	V _{ce} =20V, E _e =0.5mW/cm ² *1	--	0.30	--	mA
Collector Dark Current	I _{ceo}	V _{ce} =20V, E _e =0mW/cm ² *1	--	--	100	nA
C-E Saturation Voltage	V _{CE(sat)}	I _c =0.2mA, E _e =5mW/cm ² *1	--	0.2	--	V
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	λ _p	--	--	880	--	nm
Switching Time (Rise Time)	T _r	R _L =100Ω, V _{ce} =5V, I _c =0.5mA	--	7	--	μS
Switching Time (Fall Time)	T _f	R _L =100Ω, V _{ce} =5V, I _c =0.5mA	--	5	--	μS
Angular Response	Θ	--	--	±10	--	deg

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



Unit: mm, Tolerance: ±0.2



The information contained herein is subject to change without notice.

2021-10-08