



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Peak Sensitivity Wavelength: 880nm

The MTD8000D3 is a photo transistor in a 3mm clear plastic package. It is well suited for high reliability and high speed applications.

FEATURES

- > High Reliability in Demanding Environments
- > Wide Angular Response
- > Compact

APPLICATIONS

- > Optical Switches
- > Edge Sensing
- > Fiber Optical Communications
- > 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	50	mA
Collector Power Dissipation	P _c	200	mW
Operating Temperature Range	T _{opr}	-20 to 85	°C
Storage Temperature Range	T _{stg}	-30 to 100	°C
Junction Temperature	T _j	100	°C
Lead Soldering Temperature *1	T _{ls}	260	°C

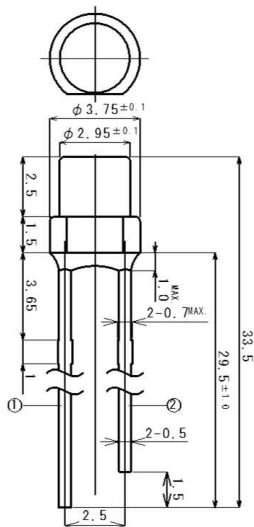
*1: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Current	I _{cel}	V _{ce} = 10V, L= 0.5mW/cm ² *1	--	0.5	--	mA
Collector Dark Current	I _{ceo}	V _{ce} = 10V	--	--	100	nA
C- E Saturation Voltage	V _{CE(sat)}	I _c = 0.2mA, L= 5.0mW/cm ² *1	--	0.2	--	V
Spectral Sensitivity	λ	--	--	450~1050	--	nm
Peak Sensitivity Wavelength	λ _p	--	--	880	--	nm
Switching Time	T _r , T _f	R _L = 1000Ω, V _c = 5V, I _c = 1mA	--	20, 20	--	uS
Angular Response	Θ	--	--	±65	--	deg

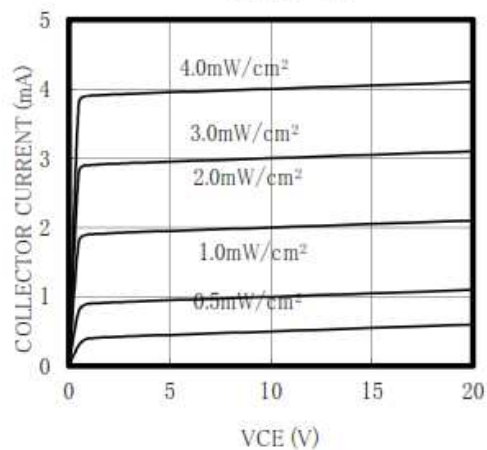
*1: Color Temperature=2870°K Standard Tungsten Lamp

Unit: mm, Tolerance: ± 0.2

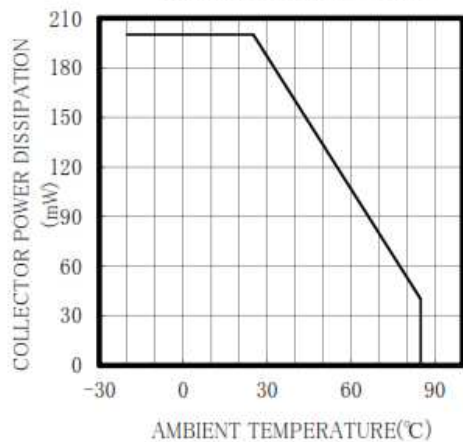


① Collector ② Emitter

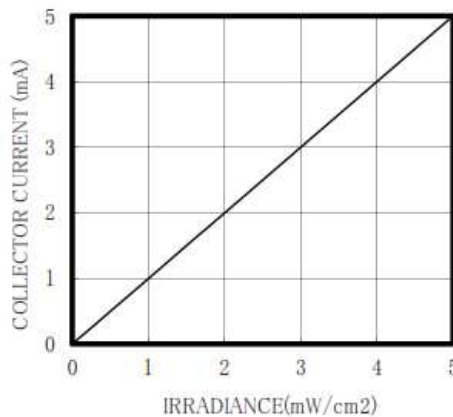
ICEL vs VCE

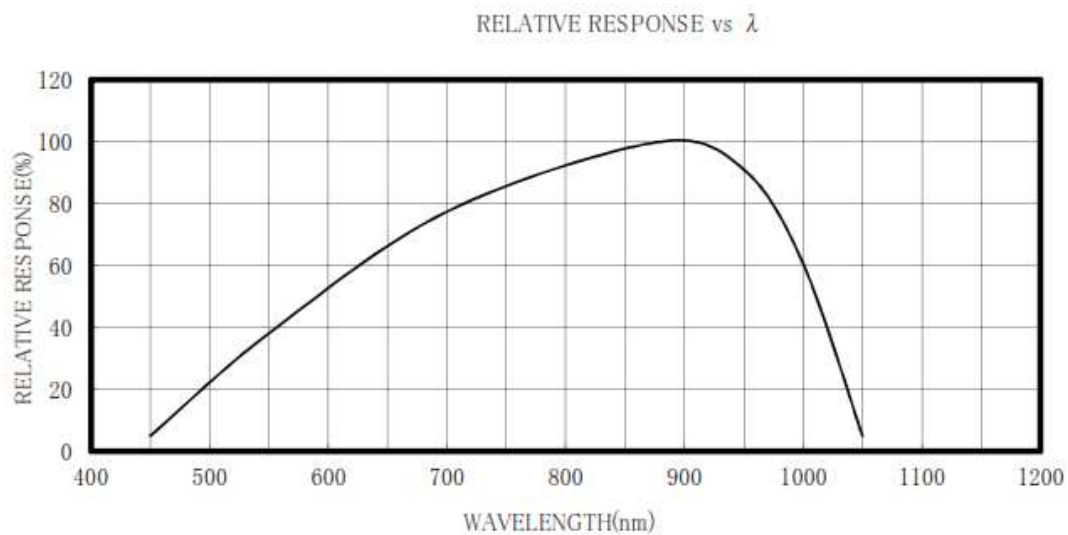
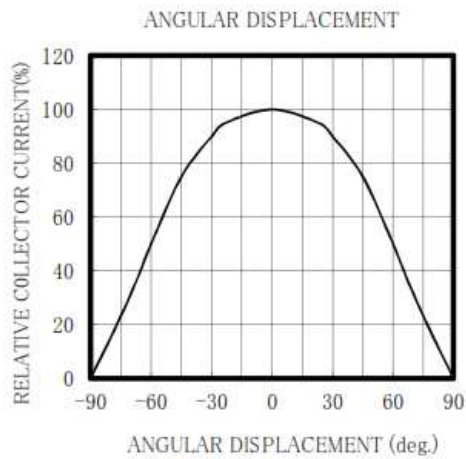


THERMAL DERATING CURVE



ICEL vs IRRADIANCE





The information contained herein is subject to change without notice.

2018-08-07