



Peak Sensitivity Wavelength: 880nm

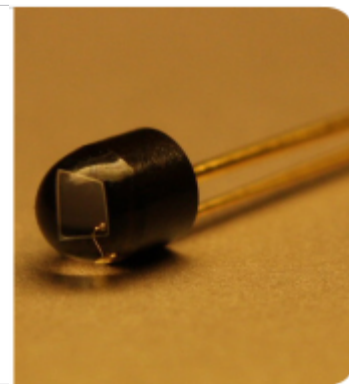
The MTD8600M3B is a photo transistor in a 3mm ceramic package. It is well suited for high reliability and high speed applications.

FEATURES

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

APPLICATIONS

- > Optical Switches
- > Optical Sensors
- > Optical Detectors



Absolute Maximum Ratings (Ta=25°C)



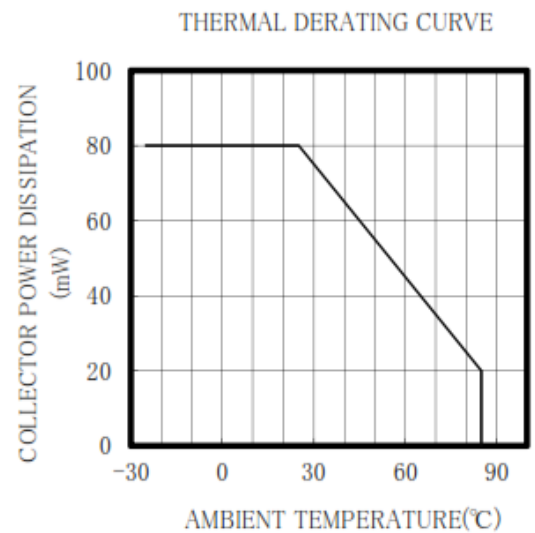
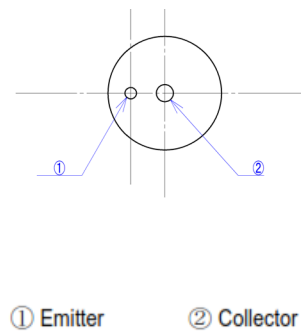
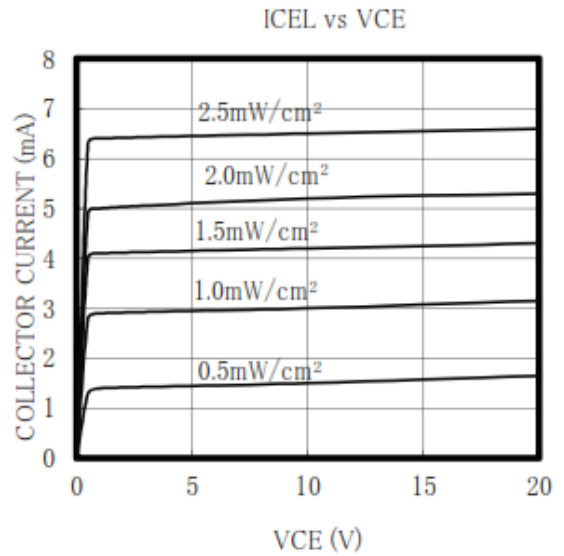
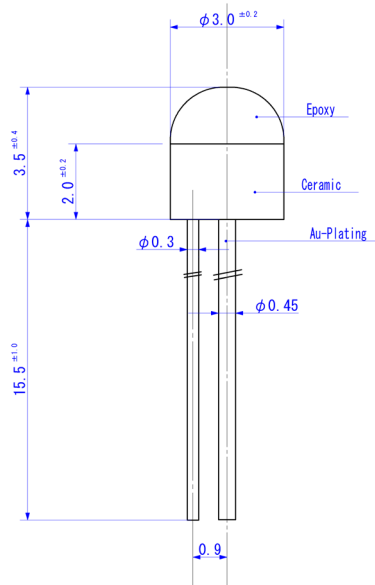
ITEMS	SYMBOL	RATINGS	UNIT
Collector-Emitter Voltage	Vceo	20	V
Emitter-Collector Voltage	Veco	5	V
Collector Current	Ic	30	mA
Collector Power Dissipation	Pc	80	mW
Operating Temperature	Topr	-25 to 85	°C
Storage Temperature	Tstg	-30 to 100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature *1	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=10V, Ee=0.5mw/cm2*	--	1.5	--	mA
Collector Dark Current	Iceo	Vce=10V, Ee=0mw/cm2*	--	--	100	nA
C-E Saturation Voltage	VCE(sat)	Ic=0.2mA, Ee=5mw/cm2	--	0.2	--	V
Spectral Sensitivity	λ			400 - 1100		nm
Peak Sensitivity Wavelength	λp		--	880	--	nm
Switching Time (Rise Time)	Tr	RL=100Ω, Vce=5V, Ic=0.5mA	--	10	--	uS
Switching Time (Fall Time)	Tf	RL=100Ω, Vce=5V, Ic=0.5mA	--	10	--	uS
Angular Response	θ		--	+/-80	--	deg

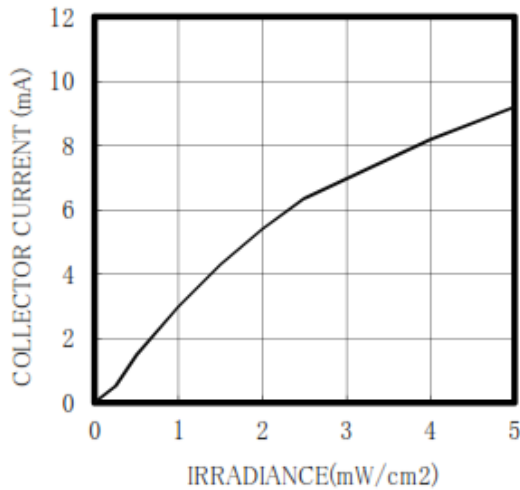
* Color Temperature=2870°K Standard Tungsten Lamp



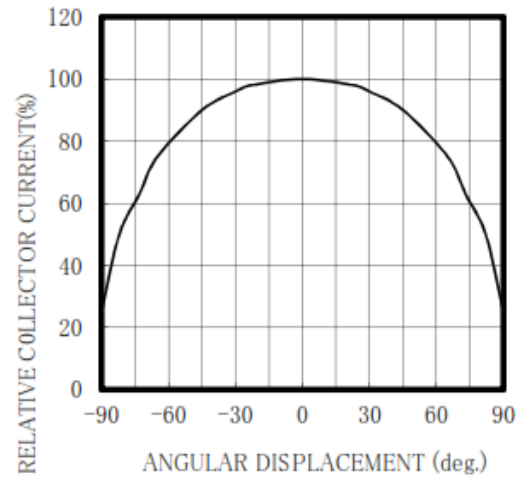
Unit: mm, Tolerance: ± 0.2



ICEL vs IRRADIANCE



ANGULAR DISPLACEMENT



RELATIVE RESPONSE vs λ

