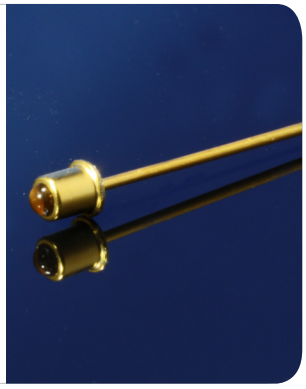
Marktech Optoelectronics

Photo Diode

Product No: **MTD6100PT**

Peak Sensitivity Wavelength: 880nm

The MTD6100PT is a photo diode in a hermetically sealed pigtail package. It is well suited for high reliability and high sensitivity applications.



FEATURES

> Linearity of Ee vs IL
> Low Dark Current / Metal Can Package
> Narrow Angular Response
> High Reliability in Demanding Environments

APPLICATIONS

> Optical Switches
> Edge Sensing
> Fiber Optical Communications
> Smoke Detectors

Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	VR	30	V
Power Dissipation	PD	100	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.

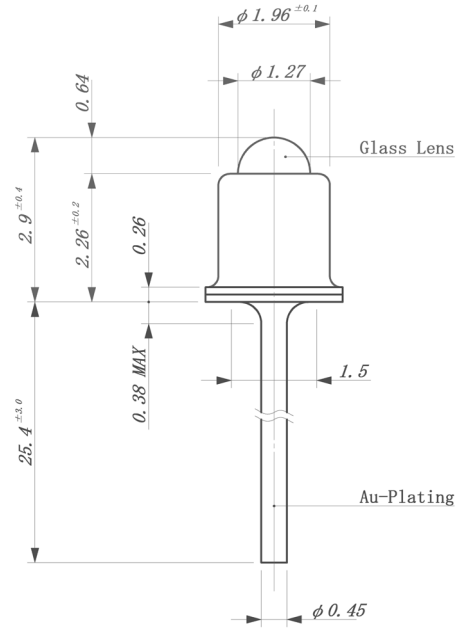
Electrical & Optical Characteristics (Ta = 25°C)

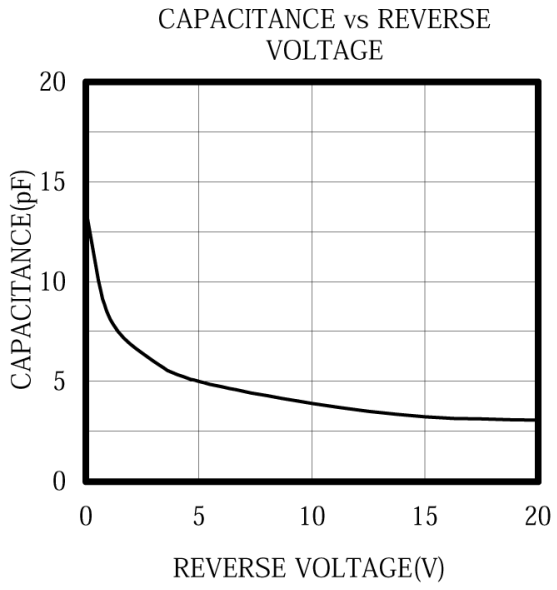
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Open Circuit Voltage	Voc	Ee=5mW/cm^2 *1	0.35	--	--	V
Light Current	IL	*1, *2	--	10	--	μA
Dark Current	ID	VR=10V	--	--	10	nA
Curve Factor	CF	Ee=5mW/cm^2 *1	0.55	--	--	--
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	λp	--	--	880	--	nm
Switching Time (Rise Time)	Tr	R=1000Ω, Vr=10V	--	6	--	nS
Switching Time (Fall Time)	Tf	R=1000Ω, Vr=10V	--	6	--	nS
Angular Response	Θ	--	--	±10	--	deg
Junction Capacitance	Cj	at 1MHz, V=5V	--	5	10	pF

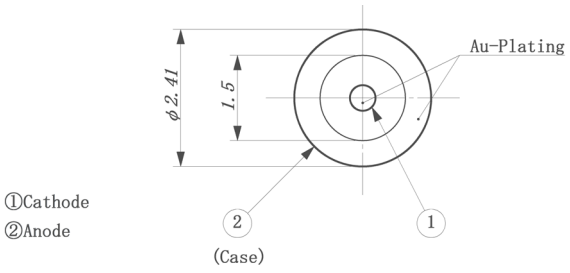
*1: Color Temperature=2870°K Stardard Tungsten Lamp, *2: VR=10V, Ee=5mW/cm^2.

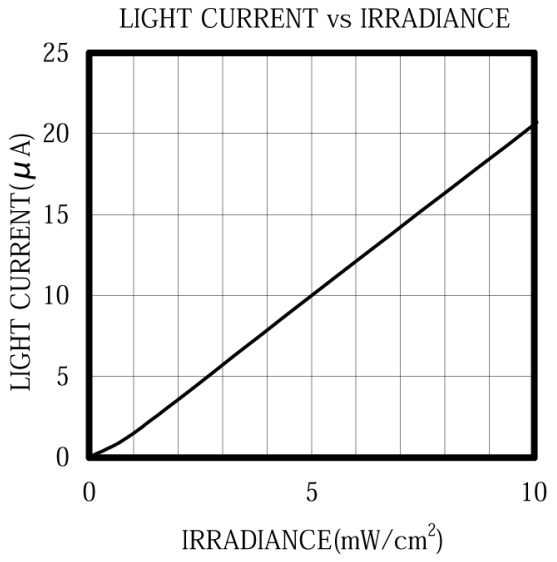
2011-07-19

Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**
TOLL FREE: 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com





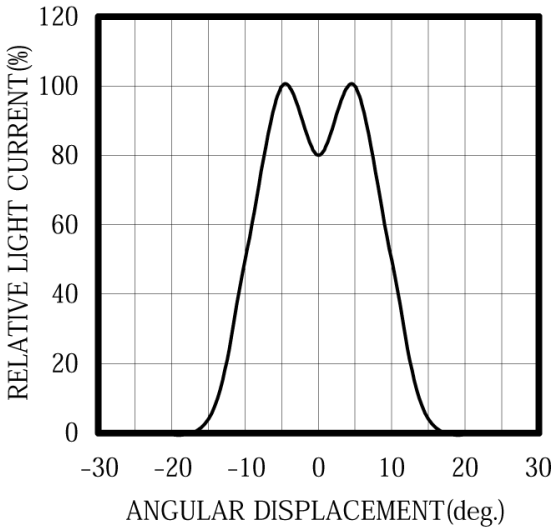




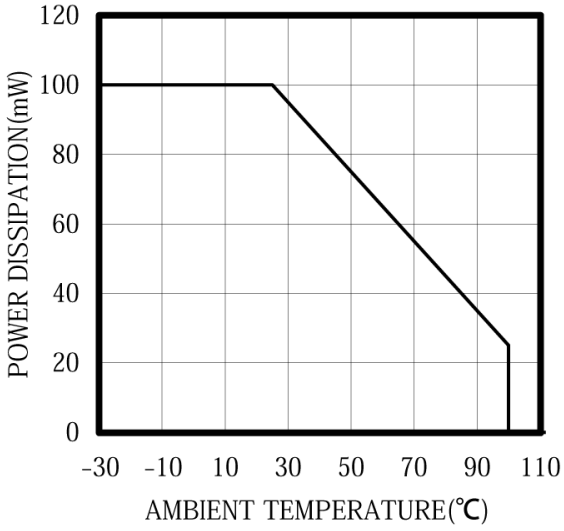
Unit: mm, Tolerance: ±0.2

2011-07-19

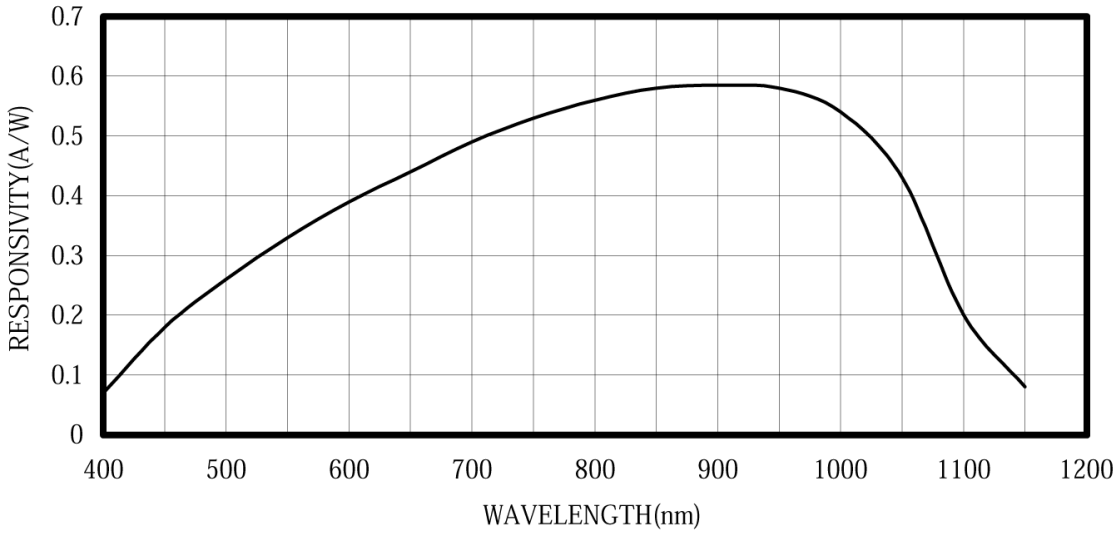
ANGULAR DISPLACEMENT



THERMAL DERATING CURVE



RESPONSIVITY



The information contained herein is subject to change without notice.

2011-07-19

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

Marktech Optoelectronics:

MTE1300N MTE8800N1 MTE8800W MTE340F11-UV MTE4110C5 MTE4110D4 MTE6114C2 MTE7063NK2-UR MT5470E-OR MTD3910G-F3 MTD6000PT-T MTPD3001D5-030 MTSM5416SMR2S MTPS3085WC1 MTE340F13-UV MT2118-G-A MTE8560P-C MTRS7010C MTAPD-06-001 MTD3910W MTE4600P-C MTE8008N3 MTE8600MC MTSM6414SMR2S MTAPD-06-009 MTE325H21-UV MTE8600N2 MTPD1346D-010 MTPS3085SMR1-IR MTRS0012C