

## Peak Sensitivity Wavelength: 900nm

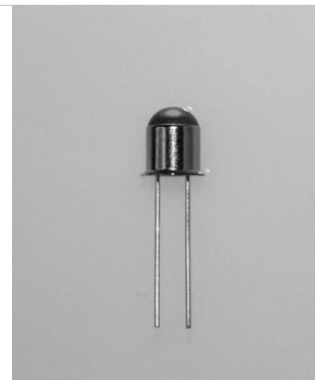
The MTD3910N is a photo diode in a TO-18 metal can package. It is well suited for high reliability and high sensitivity applications. Custom package solutions and sorting are available.

### FEATURES

- > Low Light Current
- > Linearity of  $E_e$  vs  $I_L$
- > Narrow Angular Response
- > High Reliability in Demanding Environment

### APPLICATIONS

- > Optical Switches / Sensors
- > Edge Sensing
- > Fiber Optical Communications
- > Smoke Detectors



## Absolute Maximum Ratings (Ta=25°C)



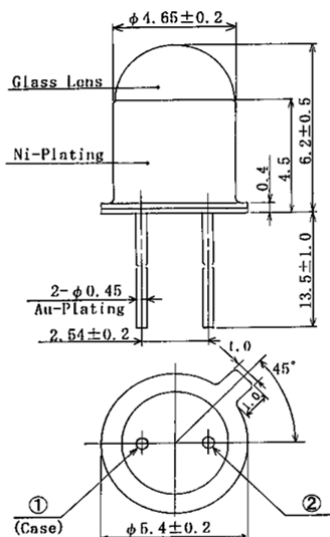
ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	VR	30	V
Power Dissipation	PD	100	mW
Operating Temperature Range	Topr	-30 to 100	°C
Storage Temperature Range	Tstg	-40 to 125	°C
Junction Temperature	Tj	125	°C
Lead Soldering Temperature*1	Tls	260	°C

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

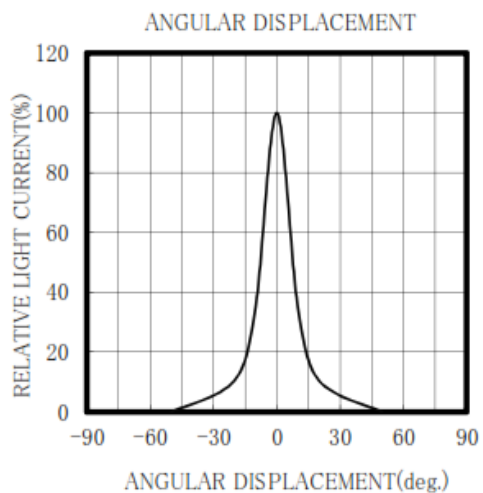
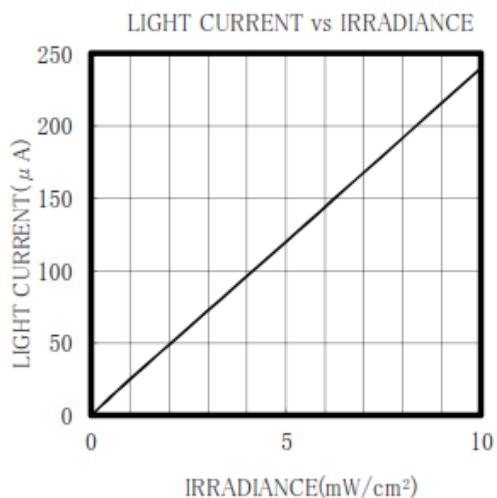
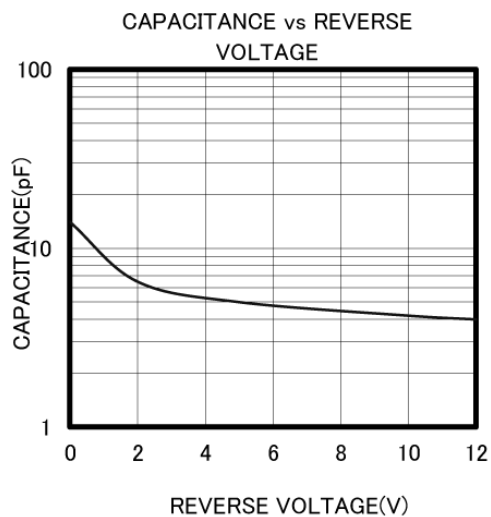
## Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Light Current	$I_L$	*1, *2	--	120	--	$\mu A$
Dark Current	$I_D$	VR=10V	--	--	10	nA
Spectral Sensitivity	$\lambda$	--	400	--	1060	nm
Peak Sensitivity Wavelength	$\lambda_p$	--	--	900	--	nm
Responsivity	S	VR=0V, $\lambda=900$	--	0.58	--	A/W
Junction Capacitance	Cj	VR=2.5V, f=1MHz	--	6	12	pF

\*1: Color Temperature=2870°K Standard Tungsten Lamp, \*2: VR=10V,  $E_e=5mW/cm^2$ .

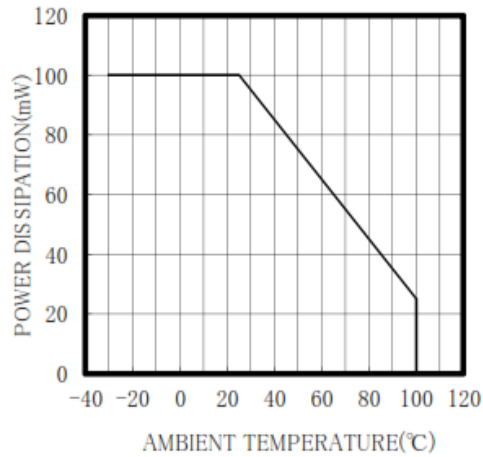


① Cathode      ② Anode

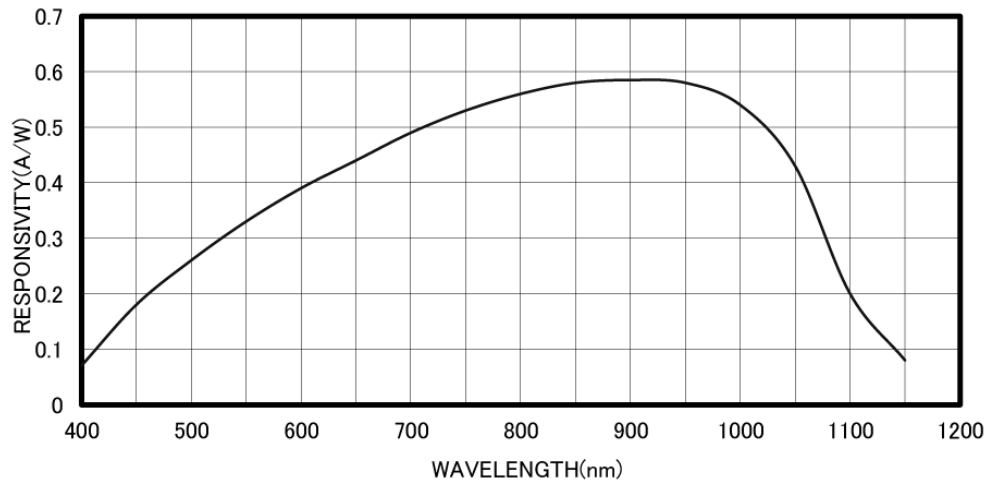


Unit: mm, Tolerance:  $\pm 0.2$

THERMAL DERATING CURVE



RESPONSIVITY



The information contained herein is subject to change without notice.

2018-02-12