

Peak Sensitivity Wavelength: 940nm

The MTD3910D3 is a photo diode in a water-clear 3mm plastic molded package. It is well suited for high reliability and high sensitivity applications. Custom package solutions and sorting are available.

FEATURES

- > High Light Current
- > Active Area: 1.21mm²
- > Low Dark Current
- > Wide Angular Response

APPLICATIONS

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



Absolute Maximum Ratings (Ta=25°C)



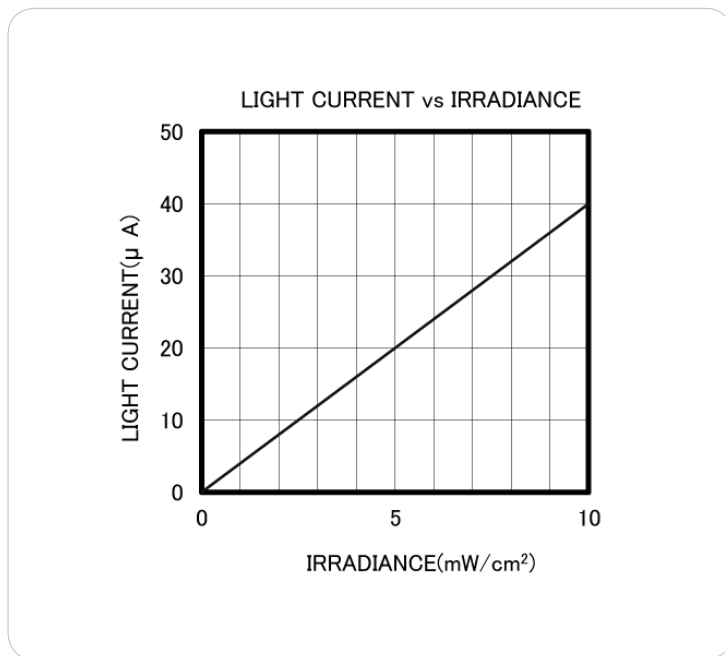
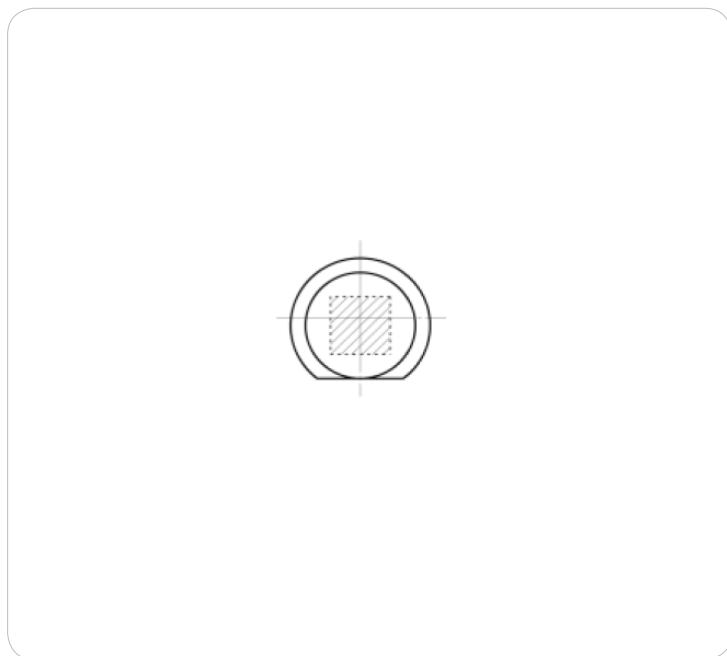
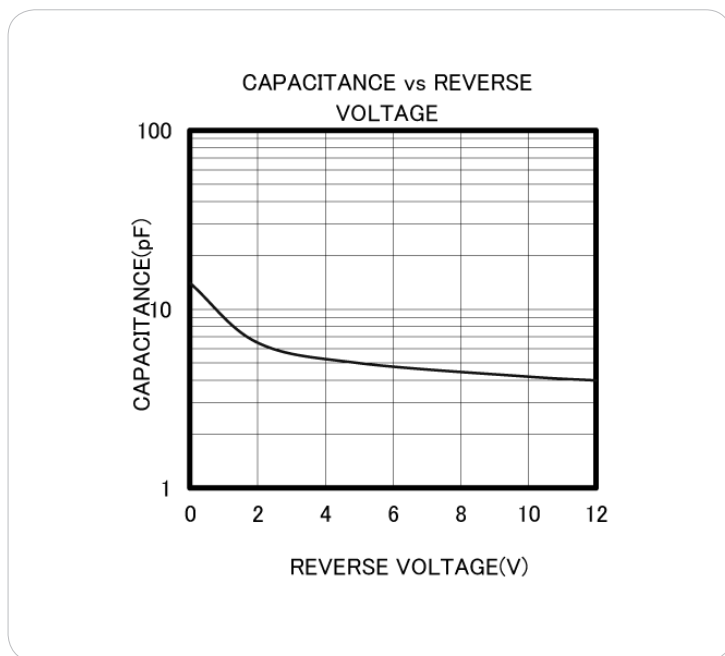
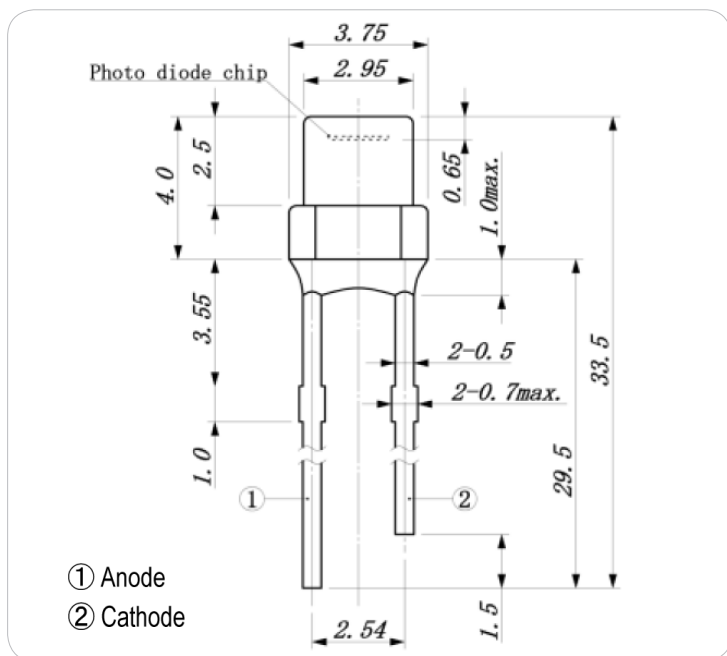
ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	VR	20	V
Power Dissipation	PD	50	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*1	Tls	260	°C

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

Electrical & Optical Characteristics (Ta = 25°C)

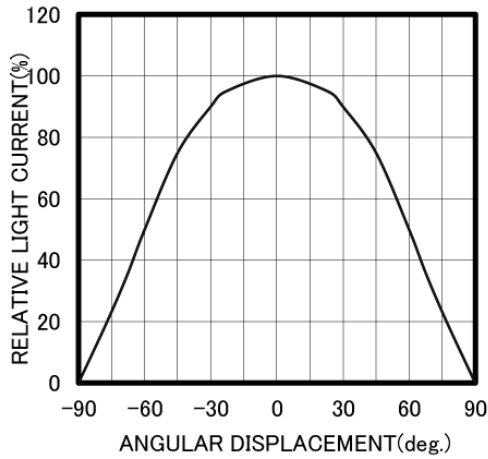
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Light Current	IL	*1, *2	15	20	--	μA
Dark Current	ID	VR=10V	--	--	10	nA
Spectral Sensitivity	λ	--	400	--	1060	nm
Peak Sensitivity Wavelength	λp	--	--	940	--	nm
Responsivity	S	λ=660nm	--	0.45	--	A/W
Junction Capacitance	Cj	VR=2.5V, f=1MHz	--	6	12	pF

*1: Color Temperature=2870°K Standard Tungsten Lamp, *2: VR=10V, E_e=5mW/cm².

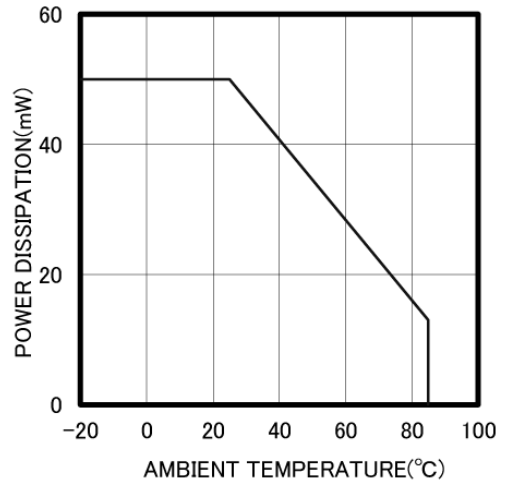


Unit: mm, Tolerance: ±0.2

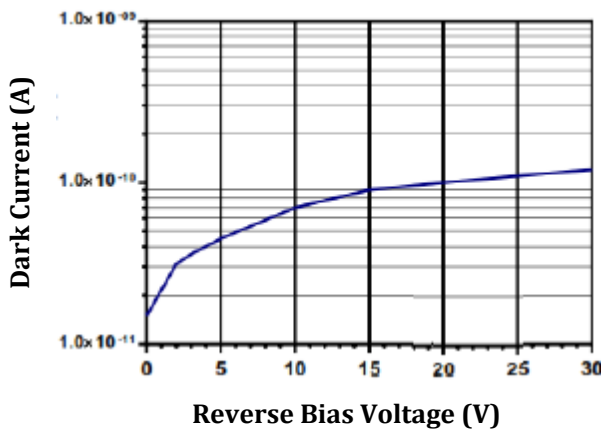
ANGULAR DISPLACEMENT



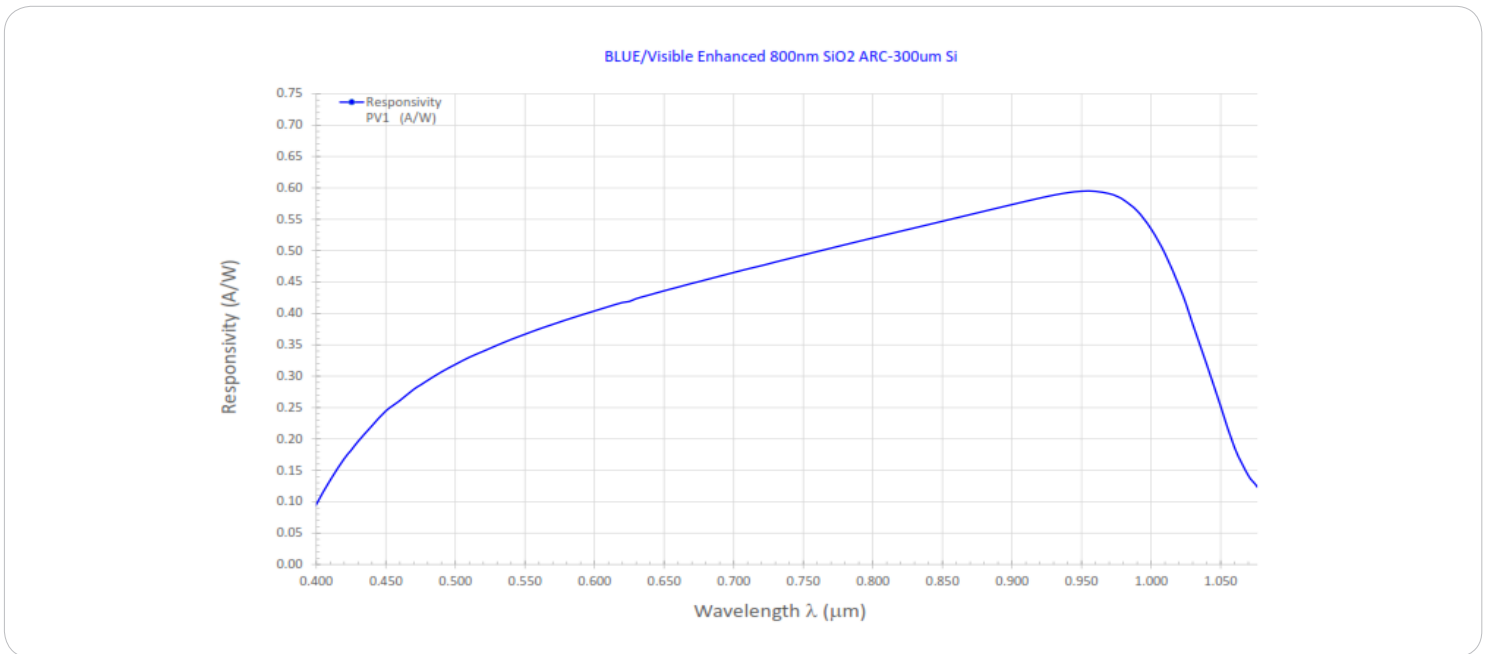
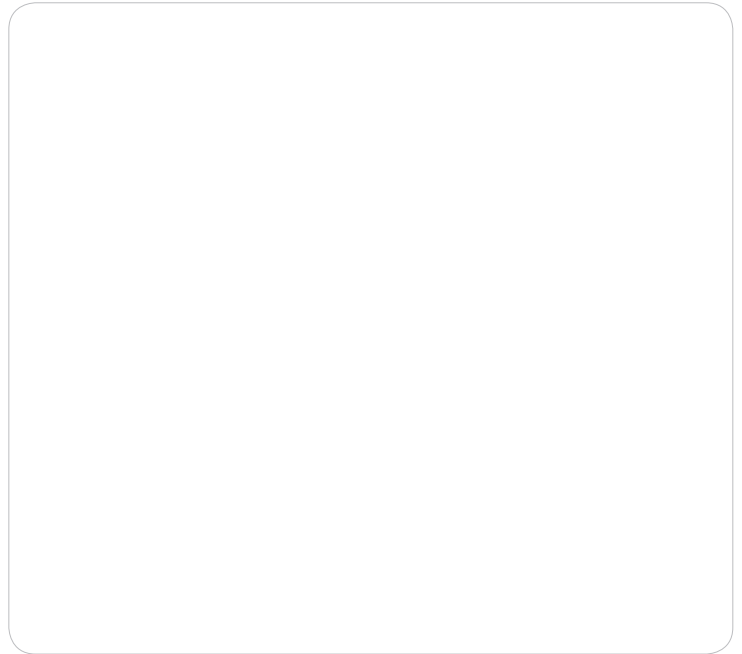
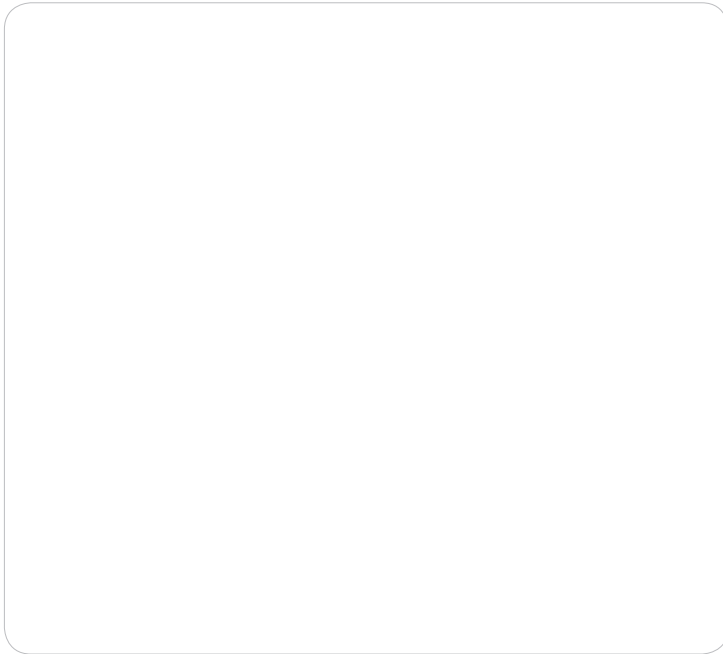
THERMAL DERATING CURVE



Dark Current vs Reverse Bias (23°C)



Unit: mm, Tolerance: ±0.2



The information contained herein is subject to change without notice.

2022-02-25