

Peak Sensitivity Wavelength: 850nm

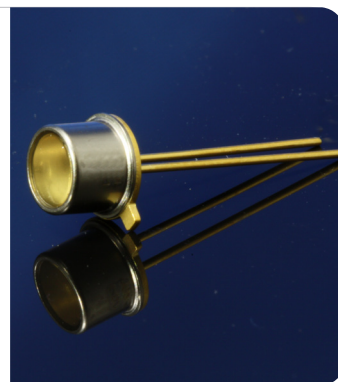
The MTD5010W is a photo diode in a TO-18 metal can flat top package. It is well suited for high reliability and high speed applications.

FEATURES

- > Ultra High Speed
- > Low Dark Current / Metal Can Package
- > Wide Angular Response
- > Active Area: 1.0mm²

APPLICATIONS

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



Absolute Maximum Ratings (Ta=25°C)



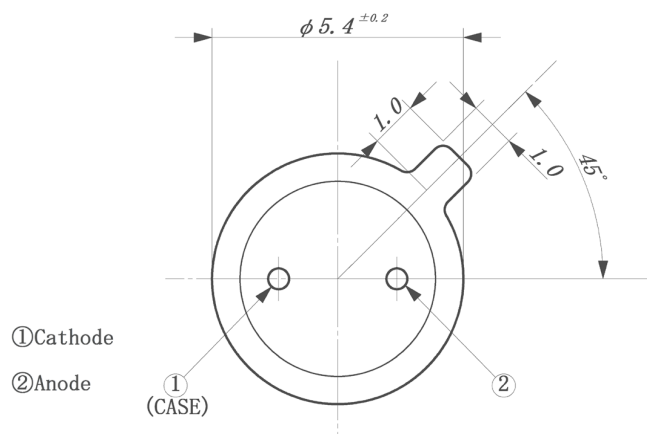
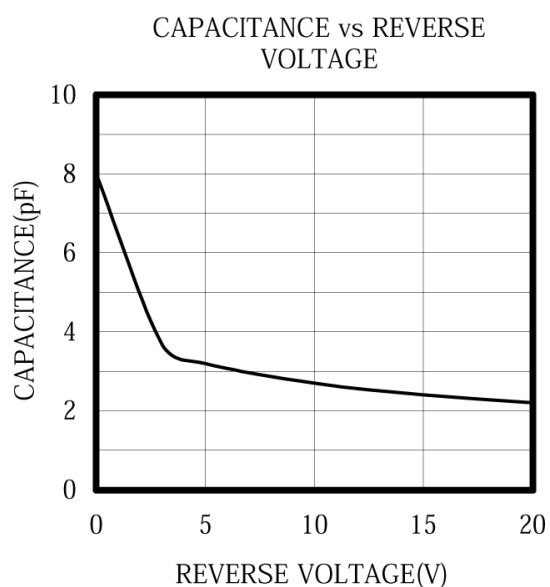
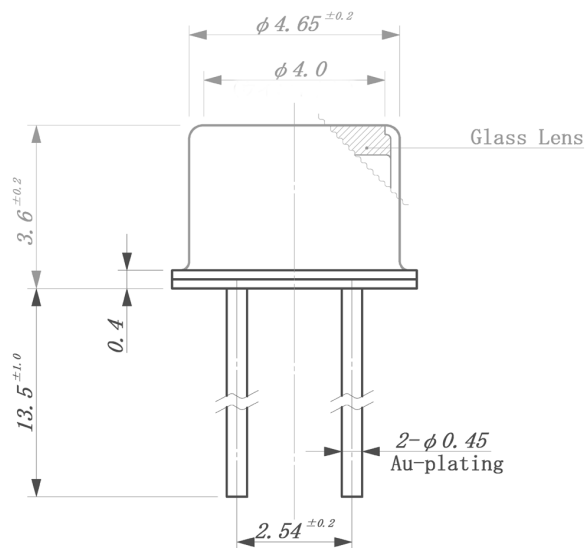
ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	VR	30	V
Power Dissipation	PD	100	mW
Operating Temperature Range	ToPr	-30 ~ +100	°C
Storage Temperature Range	Tstg	-40 ~ +125	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*1	Tls	260	°C

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

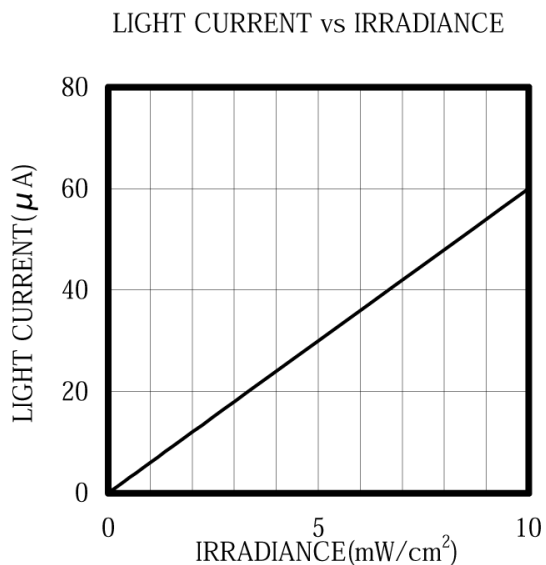
Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Light Current	IL	*1, *2	--	30	--	μA
Dark Current	ID	VR=10V	--	--	5	nA
Curve Factor	CF	Ee=5mW/cm ² *1	0.55	--	--	--
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	λp	--	--	850	--	nm
Responsivity	Rt	VR=0V, λ=450nm	--	0.20	--	A/W
Responsivity	Rt	VR=0V, λ=900nm	--	0.55	--	A/W
Angular Response	θ	--	--	±55	--	deg
Response Time	--	RL=50Ω, Vr=20V	--	3.5	--	nS
Junction Capacitance	Cj	at 1MHz, V=0V	--	8	15	pF

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

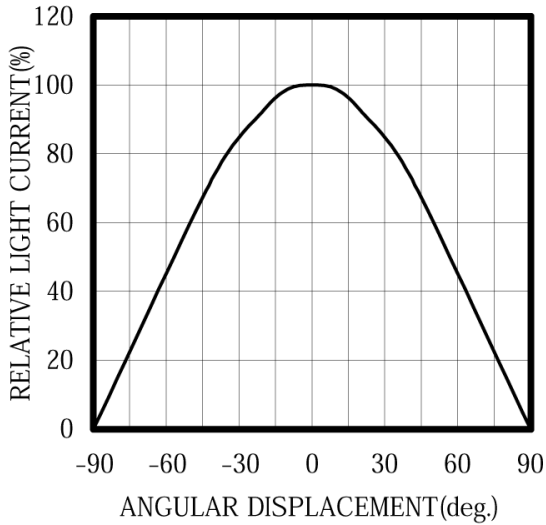


Weight: 0.25g per pc (TYP)

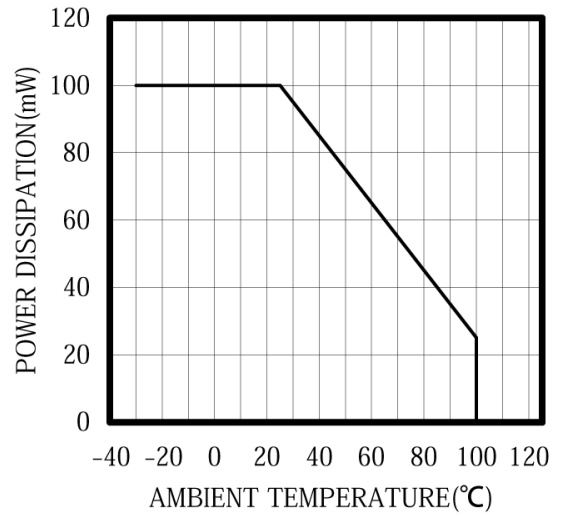


Unit: mm, Tolerance: ± 0.2

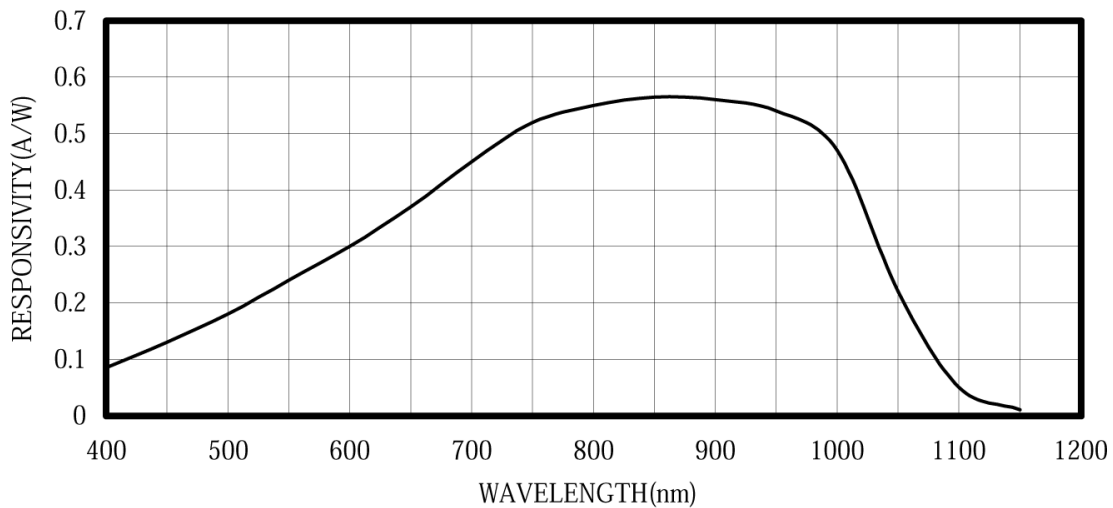
ANGULAR DISPLACEMENT

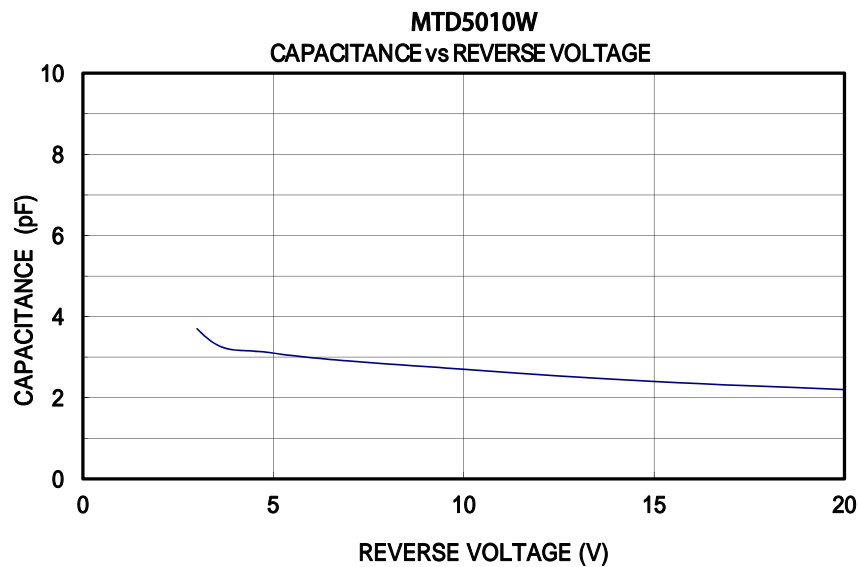


THERMAL DERATING CURVE



RESPONSIVITY





The information contained herein is subject to change without notice.

2020-10-27

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Photodiodes](#) category:

Click to view products by [Marktech](#) manufacturer:

Other Similar products are found below :

[LTR-526AD](#) [OED-SP-7L](#) [LTR-536AB](#) [LTR-743DBM1-TA](#) [67-21SYGC-S349-TR8](#) [SFH 2200 A01](#) [HFD3081-108-XBA](#) [BPW 34 S E9601](#)
[SFH 2713](#) [SFH 2703](#) [LTR-546AD](#) [BPV23FL](#) [BPW 34 FAS](#) [BPW 34 FS](#) [VTD205H](#) [VTD205KH](#) [VTP1220FBH](#) [VTP1232FH](#) [VTP4085H](#)
[OP913WSL](#) [LTR-536AD](#) [VTP8651H](#) [VTD206KH](#) [VTB1013H](#) [BPV23NF](#) [OP905](#) [LTR-516AD](#) [BPW 34 FS-Z](#) [VTD34FH](#) [QSB34CGR](#)
[PD15-22C/TR8](#) [VEMD5510C](#) [SFH 2200](#) [VEMD5510CF](#) [APS5130PD7C-P22](#) [SAH230M](#) [SAH230M2](#) [SAH500M2](#) [BP 104 FS](#) [BPW 21](#)
[BPW 34 SR-Z](#) [BPX 65](#) [HSDL-5400#011](#) [SFH 2430](#) [OP993](#) [OPF420](#) [OPF430](#) [OPF472](#) [OPR2101](#) [PC10-6B-TO5](#)