

## Peak Sensitivity Wavelength: 900nm

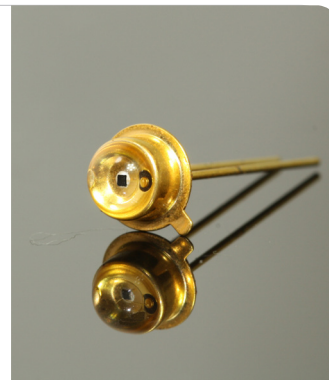
The MTD3010PM is a photo diode in a TO-18 low profile metal can domed package. It is well suited for high reliability and high speed applications.

### FEATURES

- > Linearity of Ee vs IL
- > Low Dark Current
- > Wide Angular Response
- > Active Area: 1.21mm<sup>2</sup>

### APPLICATIONS

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



## Absolute Maximum Ratings (Ta=25°C)



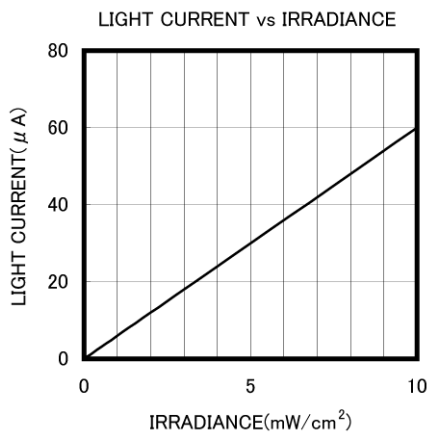
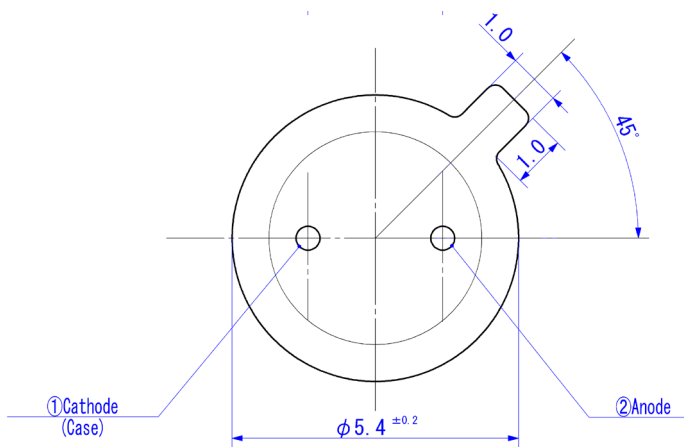
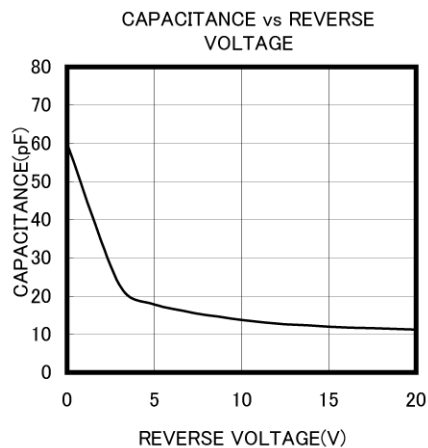
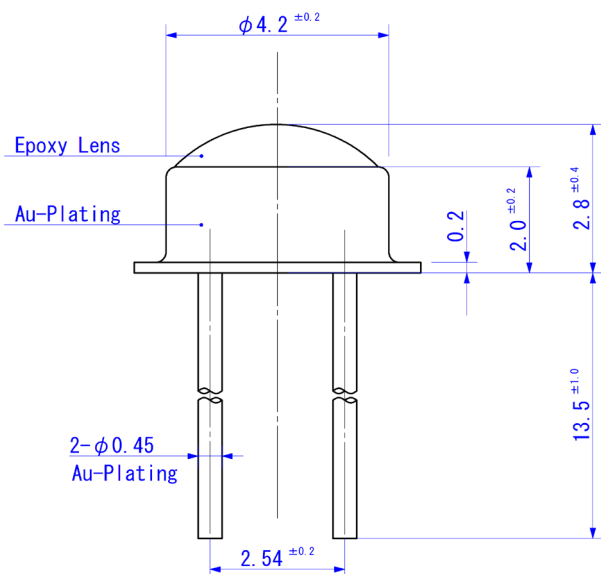
| ITEMS                        | SYMBOL | RATINGS    | UNIT |
|------------------------------|--------|------------|------|
| Reverse Voltage              | VR     | 30         | V    |
| Power Dissipation            | PD     | 100        | mW   |
| Operating Temperature Range  | ToPr   | -30 ~ +100 | °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.

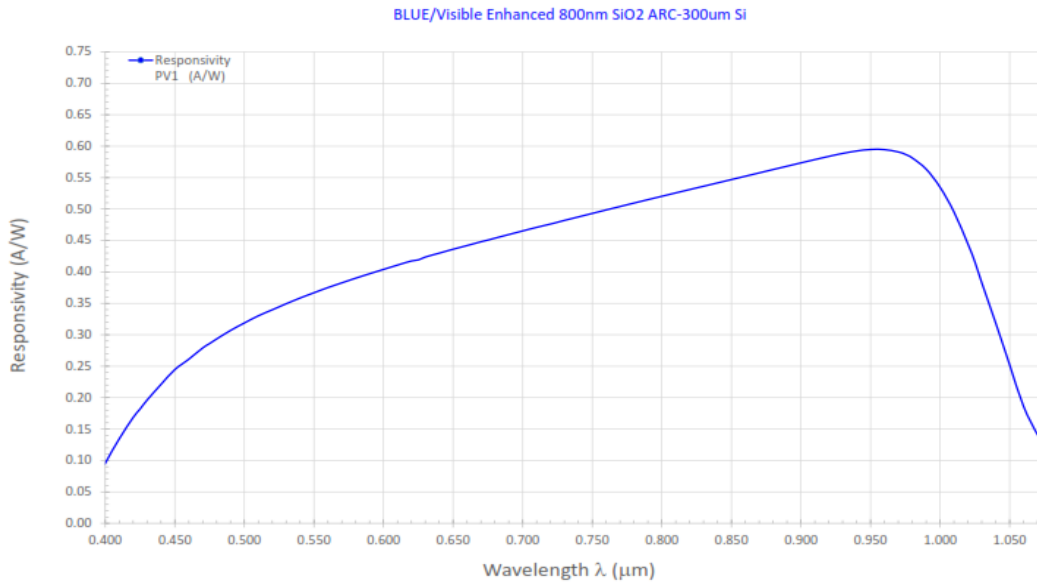
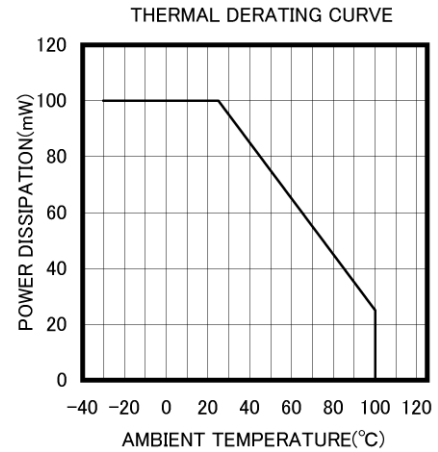
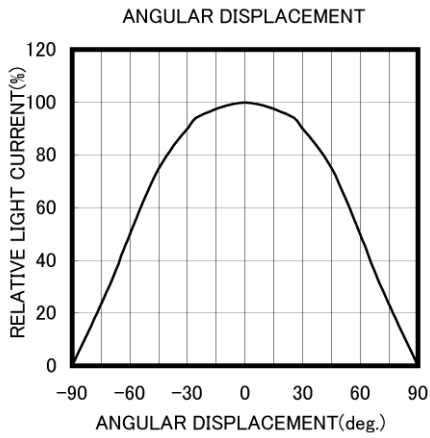
## Electrical & Optical Characteristics (Ta = 25°C)

| ITEMS                       | SYMBOL | CONDITIONS                | MIN  | TYP      | MAX | UNIT |
|-----------------------------|--------|---------------------------|------|----------|-----|------|
| Open Circuit Voltage        | Voc    | Ee=5mW/cm <sup>2</sup> *1 | 0.35 | --       | --  | V    |
| Light Current               | IL     | *1, *2                    | --   | 30       | --  | μA   |
| Dark Current                | ID     | VR=10V                    | --   | --       | 10  | nA   |
| Curve Factor                | CF     | Ee=5mW/cm <sup>2</sup> *1 | 0.55 | --       | --  | --   |
| Spectral Sensitivity        | λ      | --                        | --   | 400~1100 | --  | nm   |
| Peak Sensitivity Wavelength | λp     | --                        | --   | 900      | --  | nm   |
| Responsivity                | Rt     | VR=0V, λ=450nm            | --   | 0.18     | --  | A/W  |
| Responsivity                | Rt     | VR=0V, λ=900nm            | --   | 0.58     | --  | A/W  |
| Angular Response            | Θ      | --                        | --   | ±60      | --  | deg  |
| Junction Capacitance        | Cj     | VR=2.5V, f=1MHz           | --   | 6        | 12  | pF   |

\*1: Color Temperature=2870°K Standard Tungsten Lamp, \*2: VR=10V, Ee=5mW/cm<sup>2</sup>.



Unit: mm, Tolerance:  $\pm 0.2$



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](#) [IG17X1000S4I](#) [IG22X250S4I](#) [VTD205H](#) [VTD205KH](#)  
[VTP1232FH](#) [VTP4085H](#) [SFH 2400](#) [OP913WSL](#) [OPF794](#) [PD70-01C/TR7](#) [LTR-536AD](#) [VTP8651H](#) [VTD206KH](#) [VTB1013H](#) [BPV23NF](#)  
[OP905](#) [LTR-516AD](#) [BPW 34 FS-Z](#) [VTD34FH](#) [QSB34CGR](#) [SFH 2500 FA](#) [PD15-22C/TR8](#) [VEMD5510C](#) [SFH 2200](#) [VEMD5510CF](#)  
[SAH230M](#) [SAH230M2](#) [SAH500M2](#) [MTAPD-07-010](#) [BP 104 FS](#) [BPV22F-AS12](#) [BPW 21](#) [BPW 34 SR-Z](#) [BPX 65](#) [HSDL-5400#011](#) [BPW](#)  
[34 FASR](#)