

## Peak Sensitivity Wavelength: 940nm

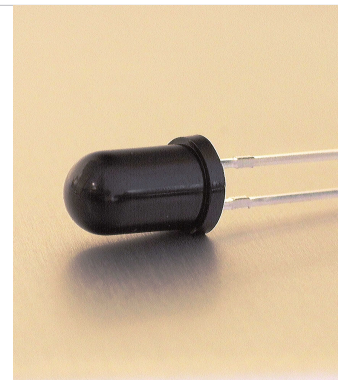
The MTD3910G-F3 is a high speed and high sensitive PIN photodiode in a standard 5mm plastic package. Due to its filtering material the device designed to reduce visible light sensitivity.

### FEATURES

- > Fast Response Time
- > High Photo Sensitivity
- > Small Junction Capacitance
- > Active Area: 1.21mm<sup>2</sup>

### APPLICATIONS

- > High Speed photodetector
- > Security System
- > Camera



## Absolute Maximum Ratings (Ta=25°C)



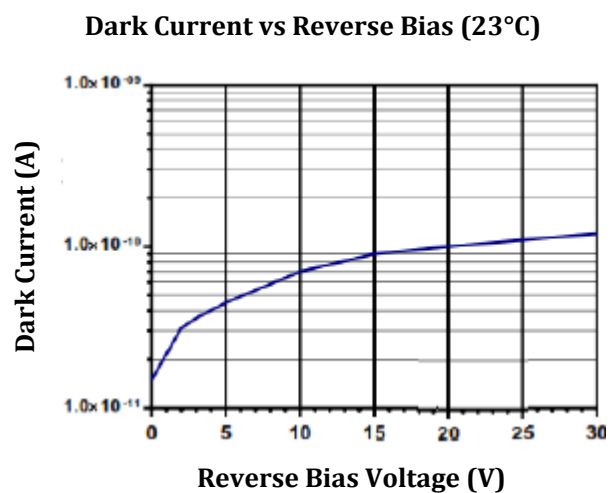
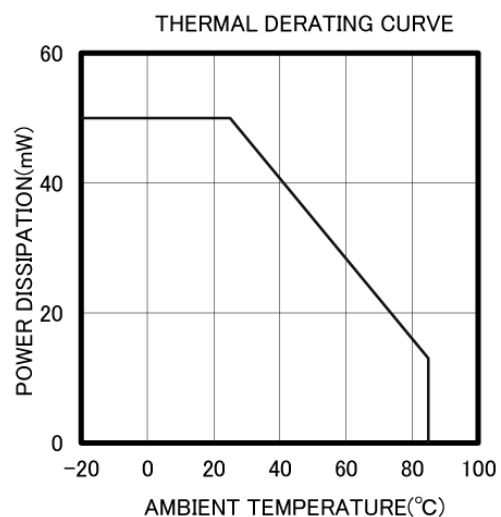
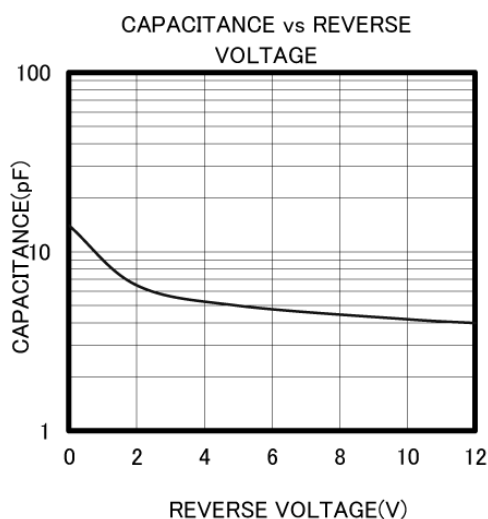
| ITEMS                        | SYMBOL | RATINGS    | UNIT |
|------------------------------|--------|------------|------|
| Reverse Voltage              | VR     | 20         | V    |
| Power Dissipation            | PD     | 50         | mW   |
| Operating Temperature Range  | Topr   | -20 ~ +85 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

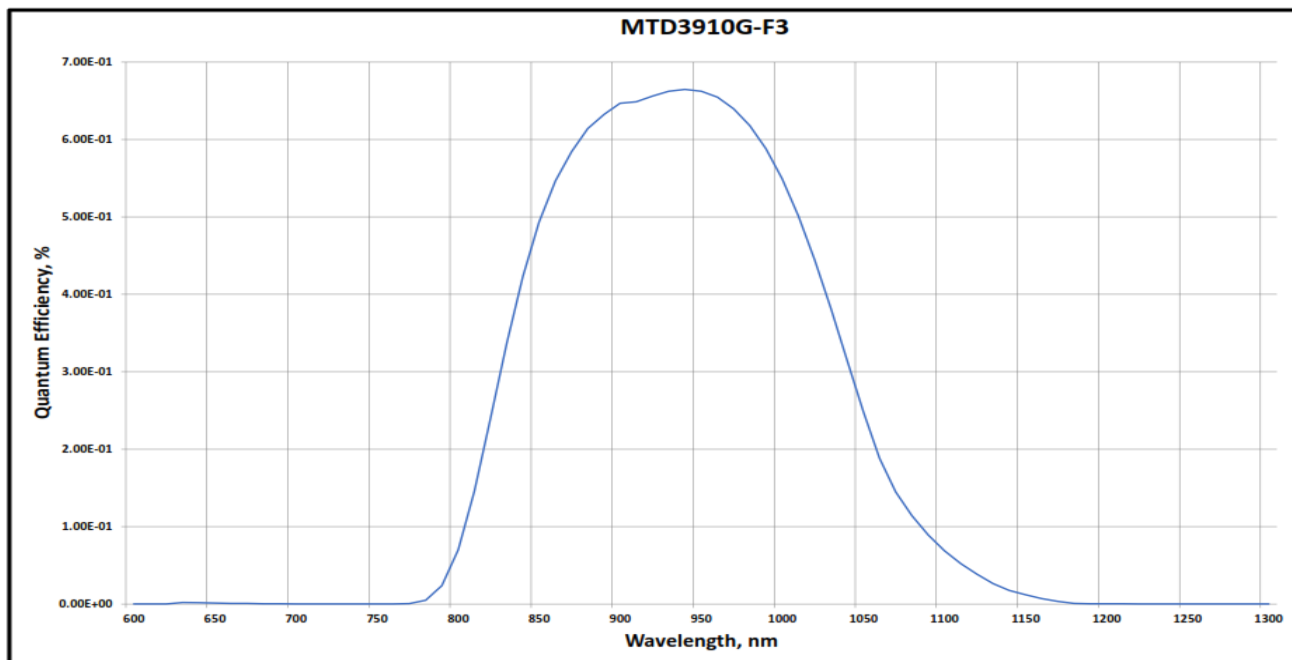
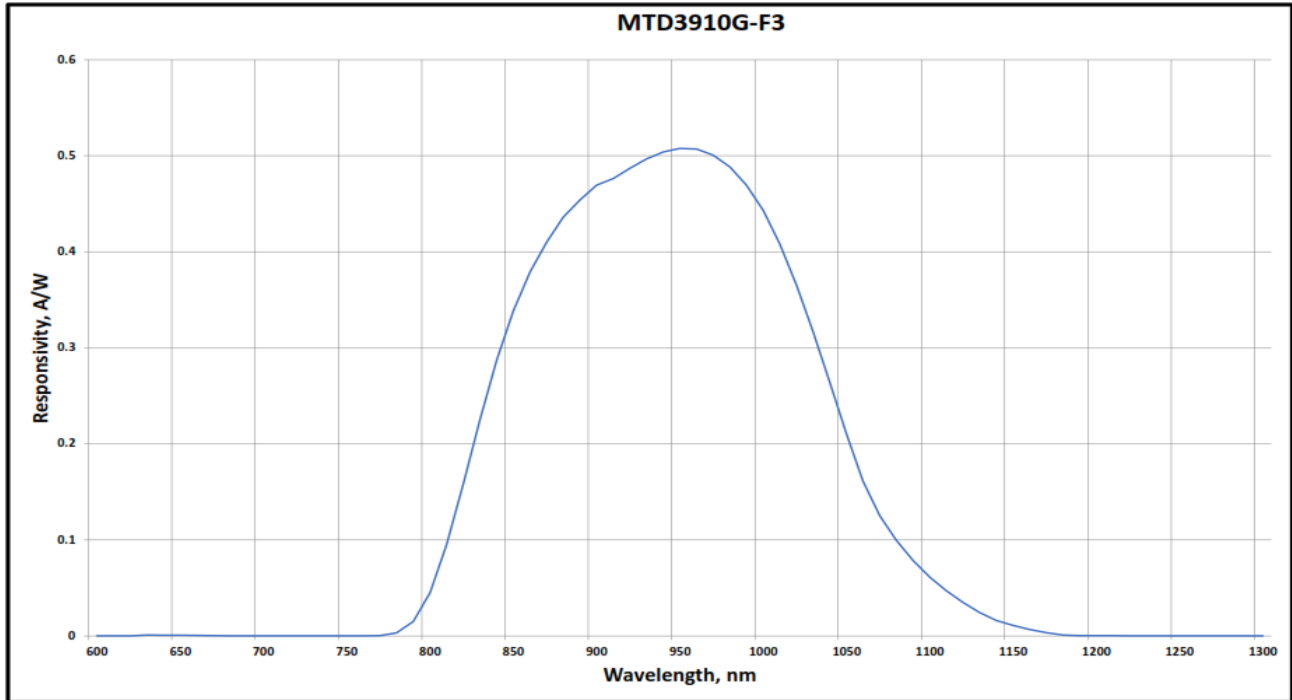
\*1: Time 5 Sec max, Position: Up to 3mm from the body.

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

| ITEMS                       | SYMBOL | CONDITIONS         | MIN | TYP  | MAX  | UNIT |
|-----------------------------|--------|--------------------|-----|------|------|------|
| Light Current               | IL     | IL=1000Lux, VR=10V | 35  | 45   | --   | μA   |
| Dark Current                | ID     | VR=10V             | --  | --   | 10   | nA   |
| Junction Capacitance        | Cj     | f=1MHz, VR=2.5V    | --  | 6    | 12   | pF   |
| Spectral Sensitivity        | λ      | --                 | 750 | --   | 1060 | nm   |
| Peak Sensitivity Wavelength | λp     | --                 | --  | 940  | --   | nm   |
| Responsivity                | R      | λ= 960nm           | --  | 0.51 | --   | A/W  |
| Quantum Efficiency          | QE     | λ= 950nm           | --  | 66   | --   | %    |







The information contained herein is subject to change without notice.

2025-04-09