Preliminary

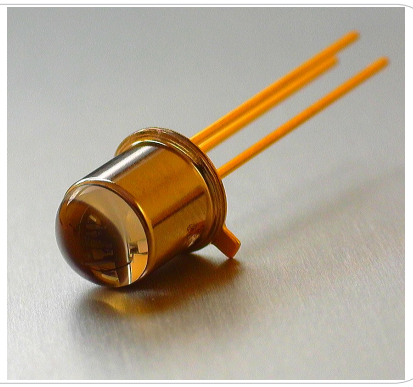
Marktech Optoelectronics

# High Speed InGaAs PIN Photodiode

Product No: **MTPD2601N-100**

## Sensitivity Wavelength Range: 800nm~2600nm

The MTPD2601N-100 from Marktech, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die is also available.



**FEATURES**

> High Speed Response
> TO-18 Metal Can Dome Package
> Active Area of 1.0mm Φ / High Sensitivity
> Spectral Range 800nm - 2600nm

**APPLICATIONS**

> High Speed Optical Communications
> Industrial Controls
> Gas/Water Analysis
> LIDAR
> Medical

## Absolute Maximum Ratings (Ta=25°C)

| ITEMS | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Active Area | Φ | 1.0 | mm |
| Operating Temperature Range | Topr | -40 to +85 | °C |
| Storage Temperature Range | Tstg | -40 to +125 | °C |

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

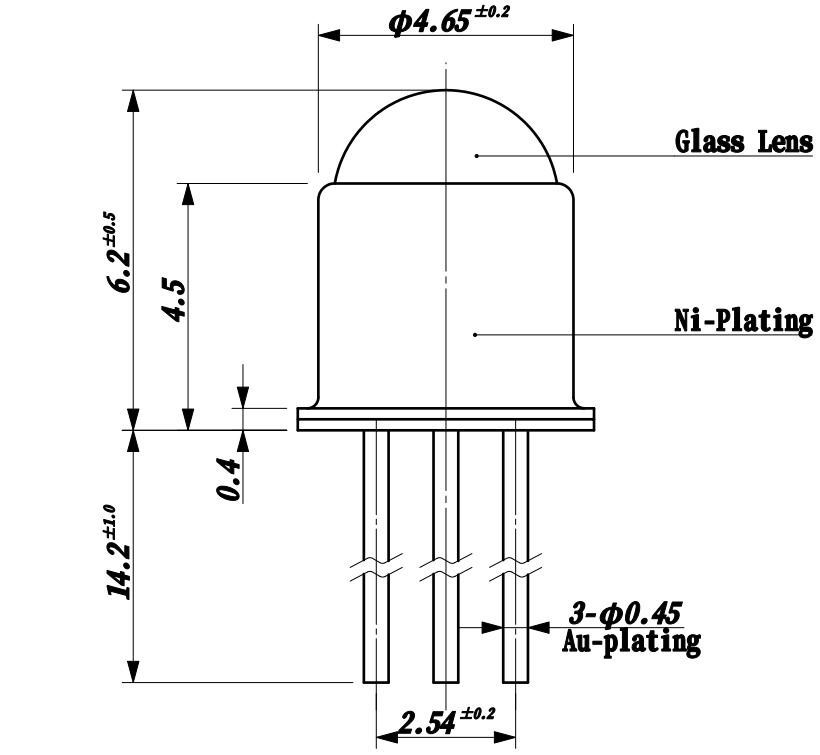
| ITEMS | SYMBOL | CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Breakdown Voltage | VR | IR=100uA | -- | -- | 1 | V |
| Sensitivity Range | λ | VR=0V | 800 | -- | 2600 | nm |
| Dark Current | ID | VR=0V | -- | 105 | -- | nA |
| Dark Current | ID | VR=1V | -- | 120 | -- | uA |
| Capacitance | C | VR=0V | -- | 800 | -- | pF |
| Capacitance | C | VR=1V | -- | 75 | -- | pF |
| Responsivity *1 | R | λ=2400nm | -- | 1.24 | -- | A/W |
| Shunt Resistance | RS | VR=10mV | -- | 3.5 | -- | kOhm |
| Quantum Efficiency *1 | QE | λ=1840nm | -- | 72 | -- | % |
| Light Current @λ=1300nm | IL | If=10mA | -- | 30 | -- | µA |
| Light Current @λ=1300nm | IL | If=20mA | -- | 65 | -- | µA |

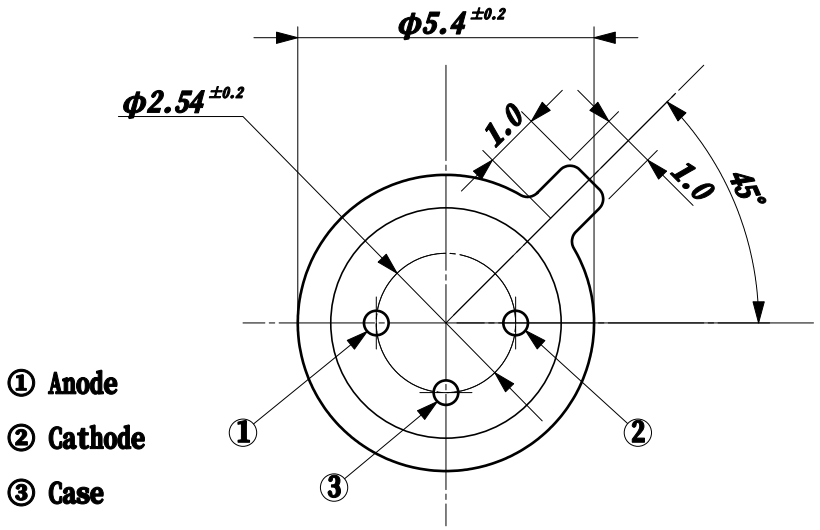
*1: As mounted on TO-46 header without resin coating or lens cap.

2023-01-20

Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**
**TOLL FREE:** 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com

## Package Dimensions



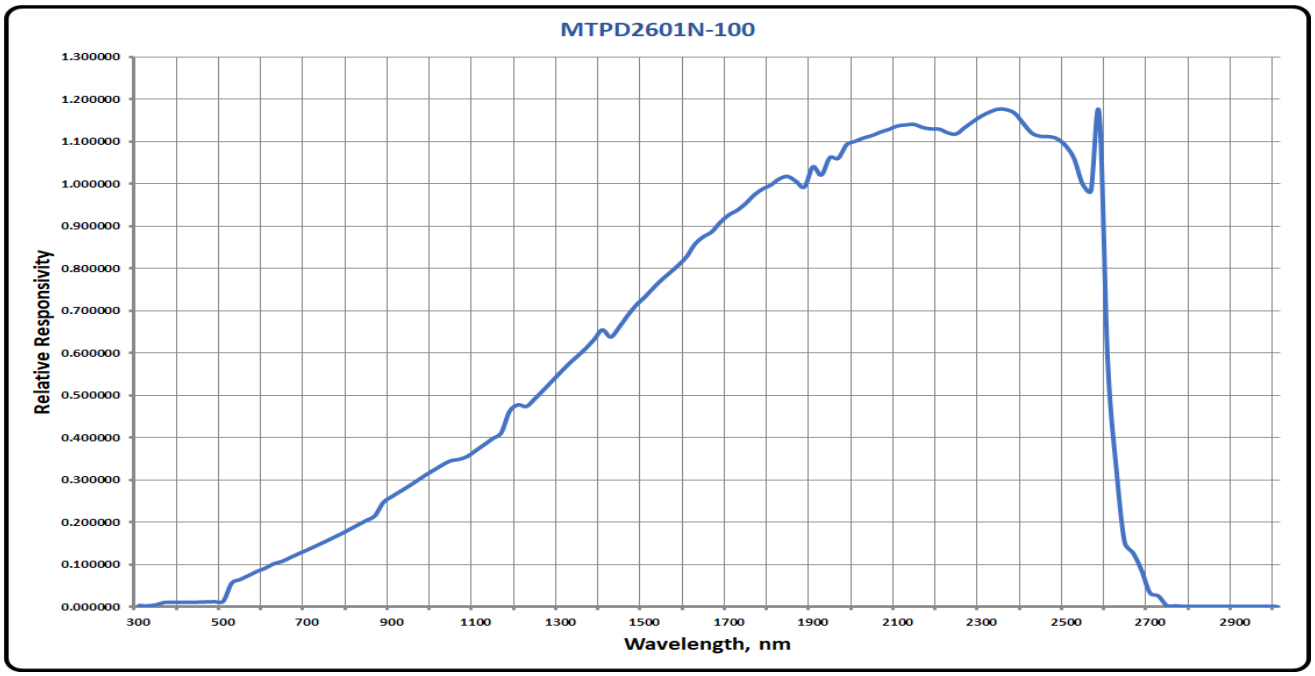




Unit: mm, Tolerance: ±0.2

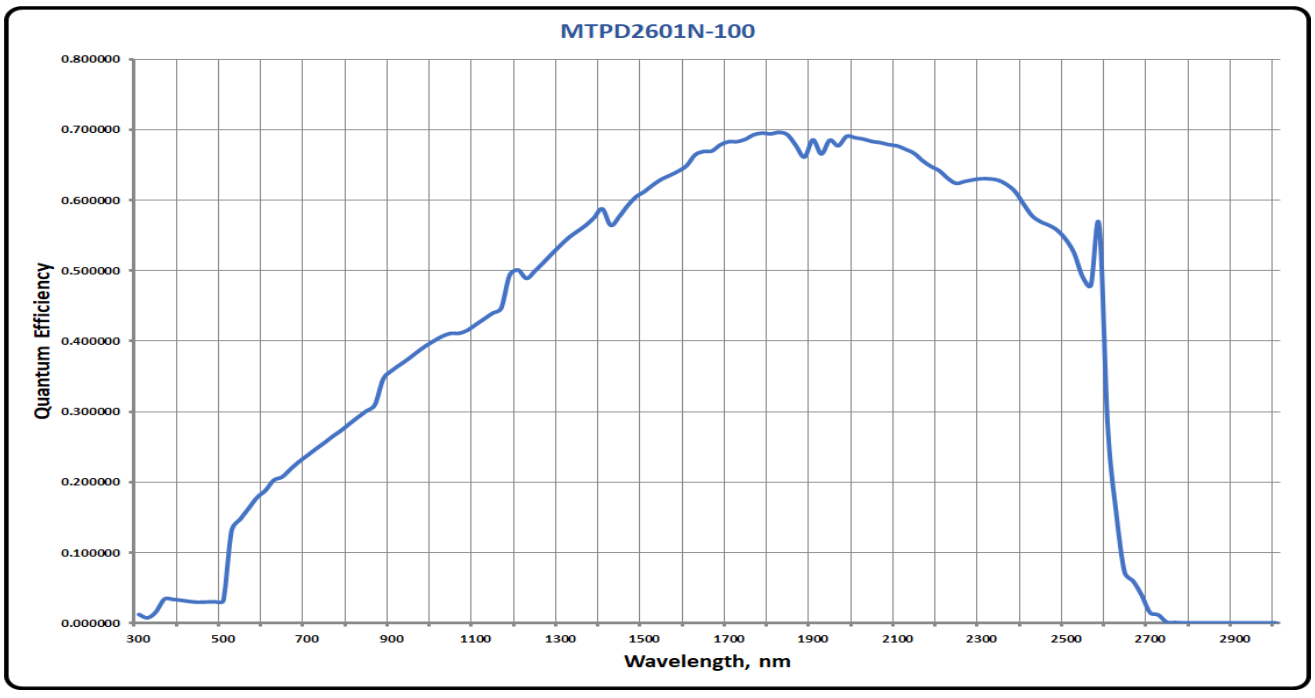
The information contained herein is subject to change without notice.

2023-01-20

## Spectral Responsivity

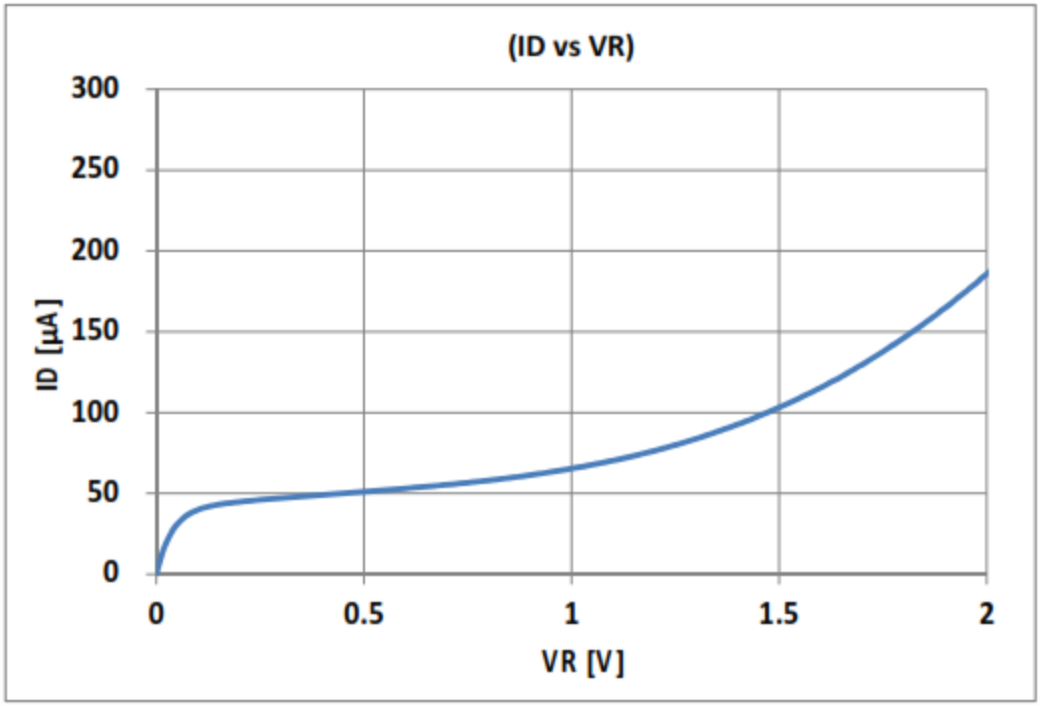


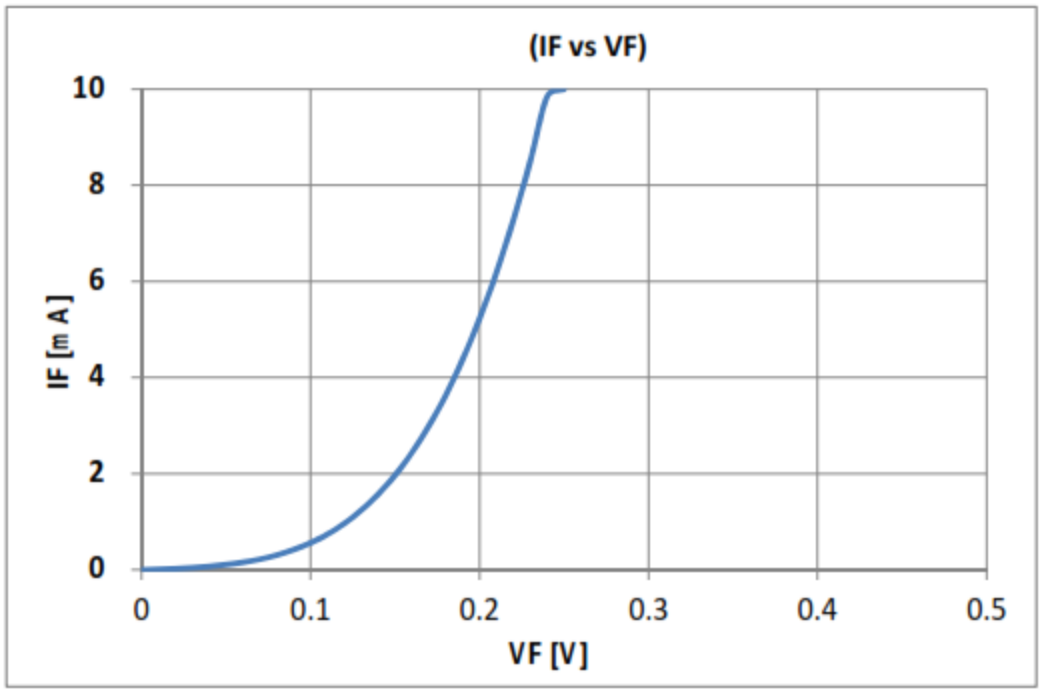

## Quantum Efficiency




The information contained herein is subject to change without notice.

2023-01-20




The information contained herein is subject to change without notice.



Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**
**TOLL FREE:** 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com

# Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

## Marktech Optoelectronics:

MTE4600P-C MTE7063NK2-UR MTPD1346D-010 MTD6000PT-T MTE340F11-UV MTE4110D4
MTE6114C2 MTPD3001D5-030 MTPS3085SMR1-IR MT5470E-OR MTAPD-06-009 MTD3910W
MTE8560P-C MTPS3085WC1 MTAPD-06-001 MTE8008N3 MTRS7010C MTSM6414SMR2S MT2118-G-A
MTE1300N MTE325H21-UV MTE8600N2 MTE8800N1 MTE8800W MTD3910G-F3 MTE4110C5
MTE8600MC MTSM5416SMR2S MTE340F13-UV MTRS0012C