



The PDTM Series of Extended-InGaAs Photodiodes provides reliable NIR detection from 0.9 to 2.6  $\mu\text{m}$  with active-area options from 0.3 to 3.0 mm, allowing a clear speed–sensitivity trade-off (smaller areas = lower capacitance and faster response; larger areas = higher sensitivity). For plug-and-play use, an optional driver PCB integrates a low-noise transimpedance amplifier, eliminating external biasing and simplifying bench setup. Standard package and accessory options are available, with custom configurations on request.

## Features

- 0.9 – 2.6  $\mu\text{m}$
- Highly Reliable Planar Device
- Low Leakage Current
- High Shunt Resistance
- High Responsivity
- Low Stray Absorption

## Applications

- OEM
- Lab user
- Instruments
- Power Monitoring
- Spectral Analysis
- Gas Leak Detection
- Medical Diagnosis
- Covert IR Sensing
- Remote Temperature Sensor

## Specifications ( $T_{\text{AMB}} = 23^{\circ}\text{C}$ )

Parameter	Min	Typical	Max	Unit
Spectral Range	0.9		2.6	$\mu\text{m}$
Aperture Size		$\varnothing 950$		$\mu\text{m}$
Dark Current (@ -0.5 V)		5	15	$\mu\text{A}$
Shunt Resistance (@ -10 mV)	2	10		$\text{k}\Omega$
Capacitance	1 MHz, 0 V	450	750	$\text{pF}$
	1 MHz, -0.5 V	150	250	
3dB Bandwidth (@ -0.5 V, 50 $\Omega$ )	10	15		MHz
Reverse Voltage			1	V
Reverse Current			1	$\text{mA}$
Forward Current			10	$\text{mA}$
Package Type		TO-46		
Responsivity	1.9 $\mu\text{m}$ , 0 V	1.0		A/W
	2.3 $\mu\text{m}$ , 0 V	1.1		
NEP (@ 2.3 $\mu\text{m}$ , 0 V)		1.5	3	$10^{-12}\text{W}/\text{VHz}$
Operation Temperature <sup>[1]</sup>	-40		85	$^{\circ}\text{C}$
Storage Temperature <sup>[1]</sup>	-40		85	$^{\circ}\text{C}$

**Note:**

[1]. Non-condensing environment

**Note:** The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this link](#):

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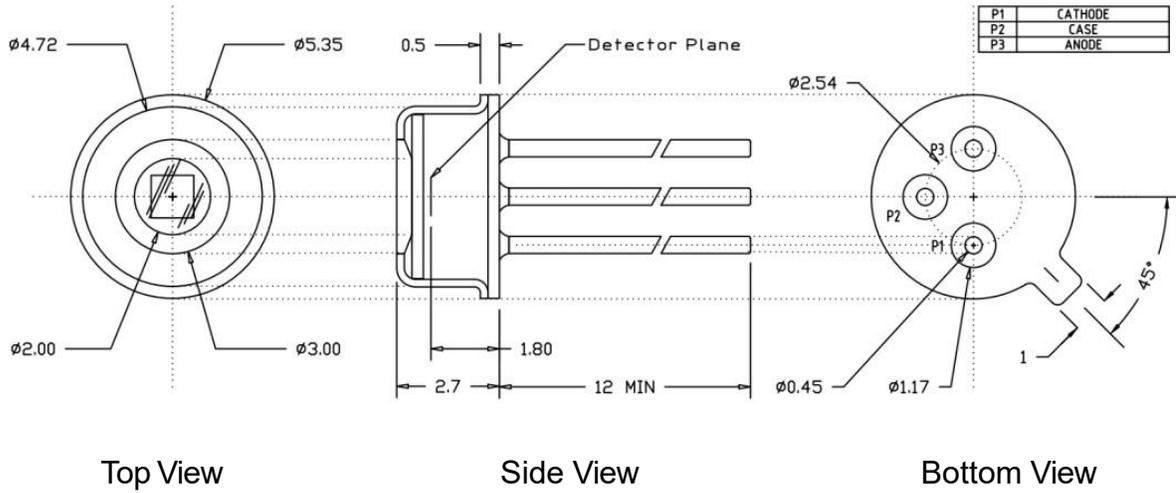
# Photodiode Extended InGaAs 0.9 – 2.6 $\mu\text{m}$



## DATASHEET

### Mechanical Dimensions (mm)

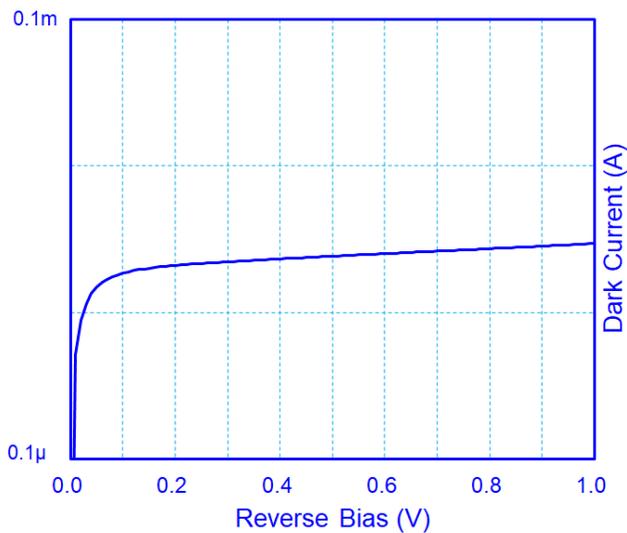
#### Package 1



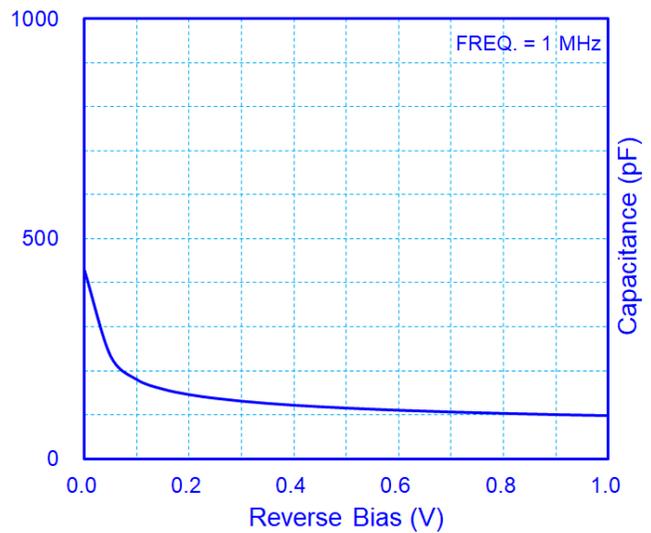
\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

### Typical Curves ( $T_{AMB} = 23^{\circ}\text{C}$ )

Dark Current



Dark Capacitance



# Photodiode Extended InGaAs 0.9 – 2.6 $\mu\text{m}$



## DATASHEET

### Ordering Information

Prefix	Wavelength	Detector Size	Window	AR Coated	Driver
PDTM-	0.9-2.6 $\mu\text{m}$ = 26	0.3mm = A3 0.5mm = A5 1mm = 10 3mm = 30	Quartz = 1 Spectral Filter = S Sapphire = 2 Non = N	Non = N Yes = 1	No = 00 Yes = 11

### Application Notes