

## Large Area InGaAs p-i-n Photodiode

## 35PD1M-TO

The 35PD1M-TO, an InGaAs photodiode with a 1mm-diameter photosensitive region and packaged in a TO-46 header, is designed for applications in high sensitivity instrumentation and sensing. Devices are hermetically sealed in a TO-46 header. Low dark current and high dynamic impedance are featured. High reliability is achieved through planar semiconductor design and dielectric-passivation. Chips can also be attached and wire bonded to customer-supplied or other specified packages.

## **Features**

Planar Structure
Dielectric Passivation
High Dynamic Impedance
High Responsivity

Device Characteristics:							
Parameters	Te	st Conditions	Min	Тур	Max	Units	
Dark Current	Class A	-1.0V	-	2	-	nA	
	Class B			100		nA	
	Class C			1		μΑ	
Capacitance		0V	-	150	- pF		
Responsivity		1300nm	0.9	-	A/W		
		1550nm	1.0	-	A/W		
Rise/Fall				15		ns	
Dynamic Impedance 0V							
	Class A		50	-	-	M ohm	
	Class B		1.0	-	-	M ohm	
	Class C		0.15	-	-	M ohm	
Absolute Maximum Ratings							
Reverse Voltage			15 Volts				
Forward Current			100 mA				
Reverse Current			20 mA				
Operating Temperature			$-40^{\circ}$ C to $+85^{\circ}$ C				
Storage Temperature			$-40^{\circ}$ C to $+85^{\circ}$ C				
Soldering Temperature				250°C			