



## Large Area InGaAs p-i-n Photodiode

### 35PD5M-TO

The 35PD5M-TO series of InGaAs photodiodes has a 5mm-diameter photosensitive region. Applications include high sensitivity instrumentation and sensing. Class A devices feature very low dark current and high dynamic impedance. High reliability is assured through planar, dielectric-passivated design, and hermetic packaging in TO-8 headers. 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	Test Conditions	Min	Typ	Max	Units
Dark Current	-0.3V	-	0.1	-	$\mu\text{A}$
Responsivity	1300nm	0.9	-	-	A/W
	1550nm	1.0	-	-	A/W
Rise/Fall			1.2		$\mu\text{s}$
Dynamic Impedance	0V				
	Class A	100	-	-	K ohm
	Class B	10	-	-	K ohm
NEP	Class A		$2 \times 10^{-13}$		$\text{WHz}^{-1/2}$
	Class B		$6 \times 10^{-13}$		$\text{WHz}^{-1/2}$
D*	Class A		$2 \times 10^{12}$		$\text{cmHz}^{1/2}\text{W}^{-1}$
	Class B		$6 \times 10^{11}$		$\text{cmHz}^{1/2}\text{W}^{-1}$
Absolute Maximum Ratings					
Reverse Voltage				1 Volts	
Forward Current				200 mA	
Reverse Current			30 mA		
Operating Temperature			-40°C to + 85°C		
Storage Temperature			-40°C to + 85°C		
Soldering Temperature			250°C		

829 Flynn Road, Camarillo, CA 93012    tel(805)445-4500    fax(805)445-4502