



## InGaAs PIN Photodiode in TO-46 Package for 1300nm Emitter

Part No. PDT-A13A30

### Features

- Industry standard TO-46 package with cap lens
- Optimized for fiber optic application
- Sensitive area 120um diameter
- High coupling efficiency to multi-mode fibers directly
- Low dark current and low capacitance



### Specifications

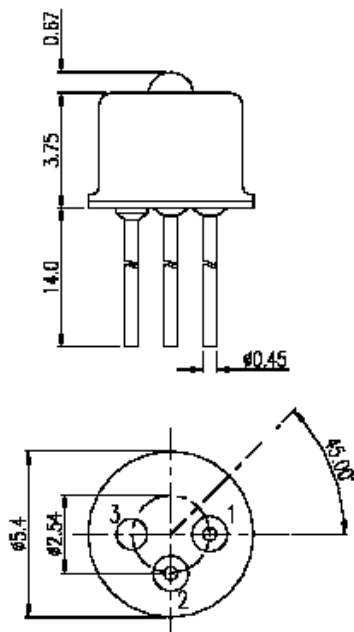
Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity <sup>(1)</sup>	R	0.8	0.9	-	A/W	V <sub>R</sub> =5V, λ=1300 nm
Forward Current	I <sub>F</sub>	100	-	-	uA	V <sub>F</sub> =1V
Dark Current	I <sub>D</sub>	-	1	2	nA	V <sub>R</sub> =5V
Breakdown Voltage	V <sub>BD</sub>	-	35	-	V	I <sub>R</sub> =10uA
Capacitance <sup>(2)</sup>	C	-	1.5	1.7	pF	V <sub>R</sub> =5V, f=1 MHz

Notes:

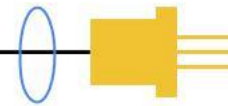
1. The responsivity is measured with a receptacle package, using a 1300nm LED as the optical light source to the fiber.
2. Sensitive area is typical 120um in diameter.

Absolute Maximum Ratings					
Parameters	Min.	Max.	Unit	Conditions	
Storage Temperature	-40	125	°C		
Operating Temperature	-20	85	°C		
Lead Solder Temperature		260	°C	10 seconds	

### Outline Dimensions (unit: mm)



Pinout  
1. Anode  
2. Cathode  
3. NC



## Typical Characteristics

Fig. 1 Typical Forward Current and Dark Current

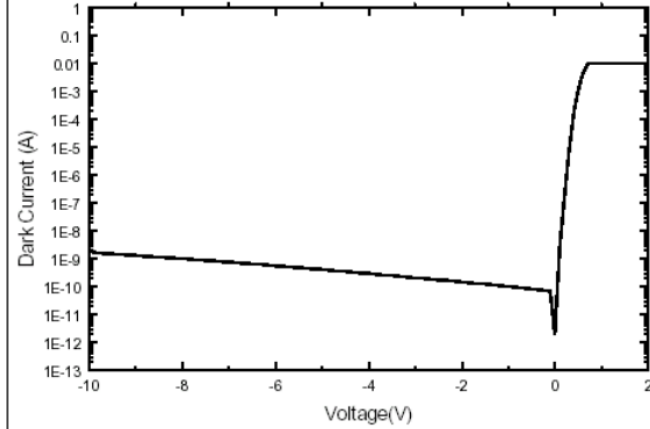


Fig. 2 Typical Photo-Current

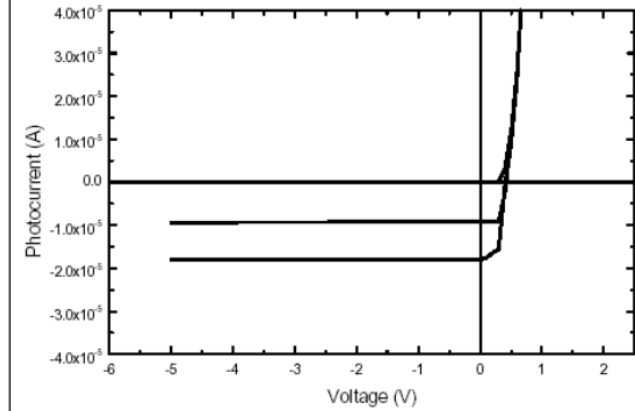


Fig. 3 Typical Breakdown Curve

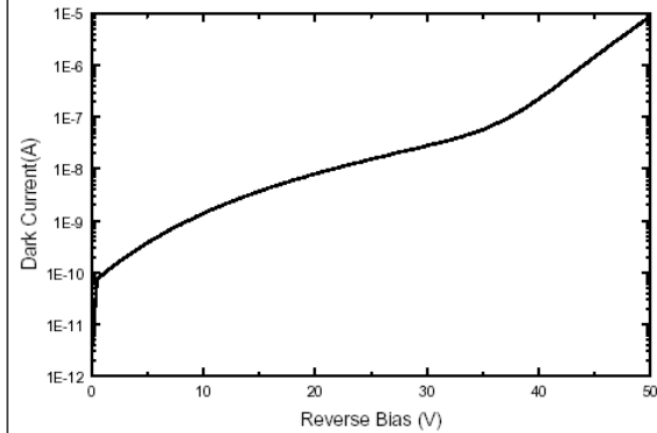
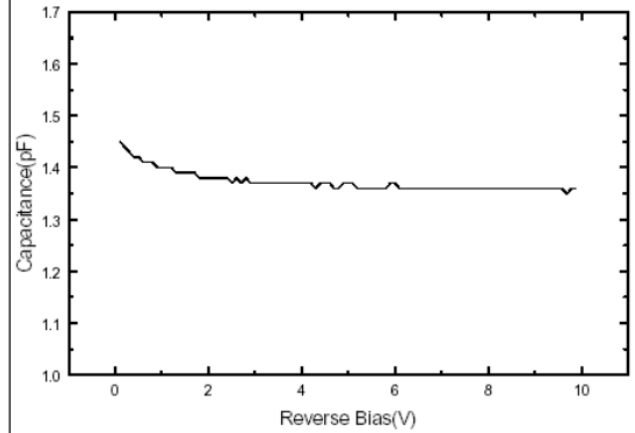


Fig. 4 Typical C-V Curve



Note: Specifications are subject to change without notice.