



Model No. PDT-A13A30  
InGaAs PIN Photodiode in TO-46 Package for 1300nm Emitter

FEATURES

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



ELECTRO-OPTICAL CHARACTERISTICS

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST 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	-	-	μA	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> =10μA
Capacitance <sup>(2)</sup>	C	-	1.5	1.7	pF	V <sub>R</sub> =5V, f=1 MHz

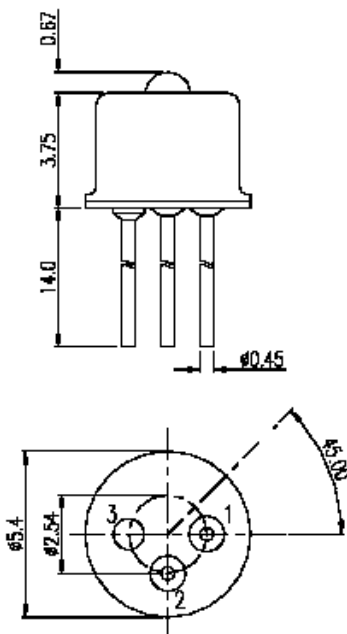
Notes:

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

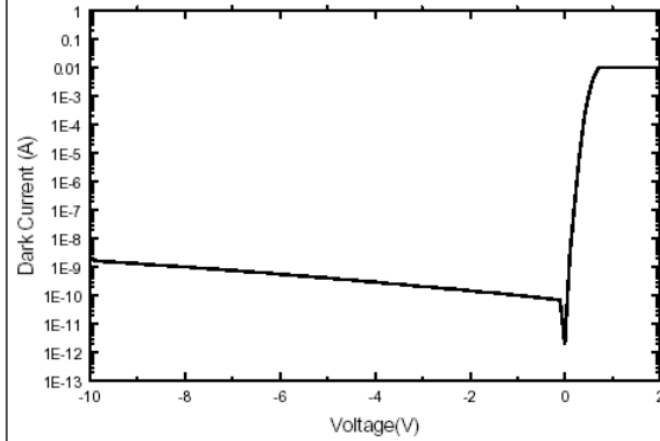


Fig. 2 Typical Photo-Current

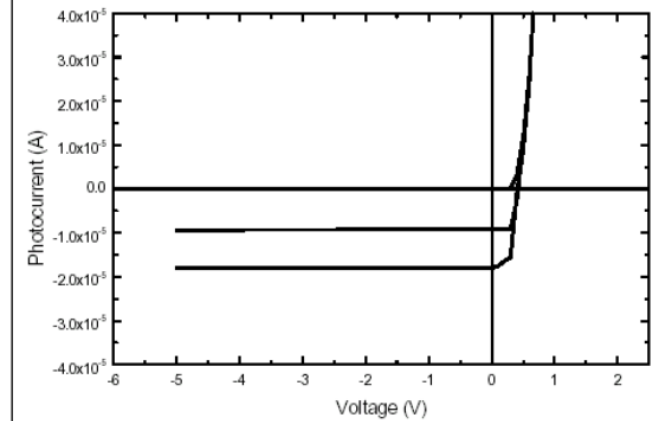


Fig. 3 Typical Breakdown Curve

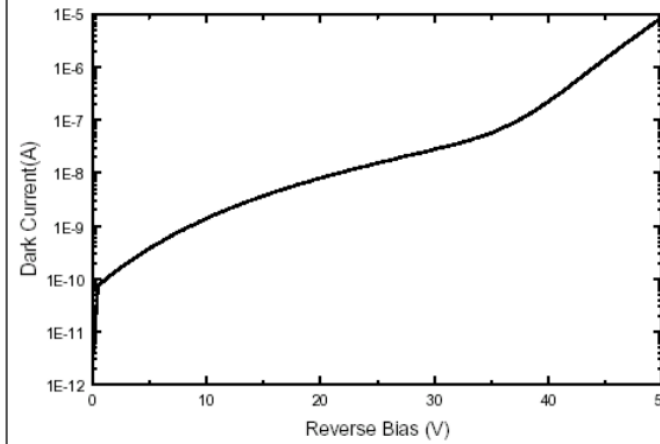
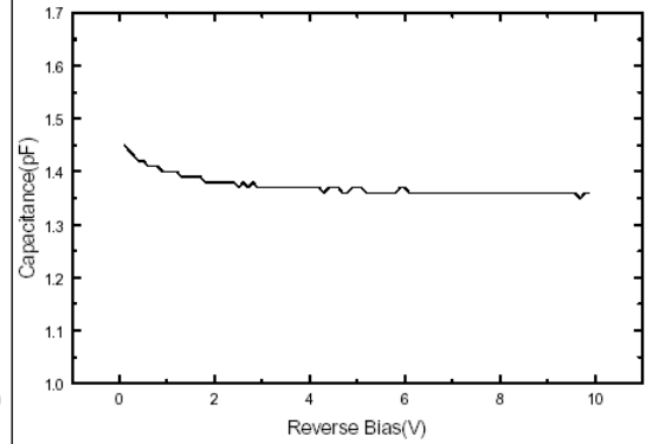


Fig. 4 Typical C-V Curve



**Note:** The above specifications are subject to change without notice.

