



PDT-A13A30

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

Overview

The Lasermate PDT-A13A30 is a low dark current, low capacitance, InGaAs photodiode in TO-46 package designed for use in fiber optic data communication applications.



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
- Low capacitance

Applications

- Optimized for fiber optic application

Specifications

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity ⁽¹⁾	R	0.8	0.9	-	A/W	V _R =5V, λ=1300 nm
Forward Current	I _F	100	-	-	μA	V _F =1V
Dark Current	I _D	-	1	2	nA	V _R =5V
Breakdown Voltage	V _{BD}	-	35	-	V	I _R =10μA
Capacitance ⁽²⁾	C	-	1.5	1.7	pF	V _R =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	

Typical Characteristics

Fig. 1 Typical Forward Current and Dark Current

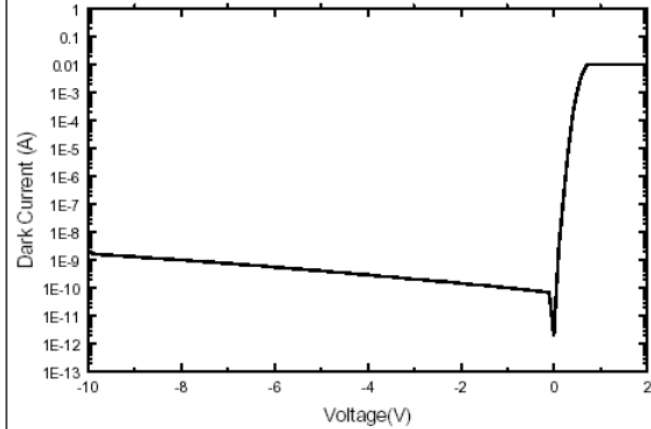


Fig. 2 Typical Photo-Current

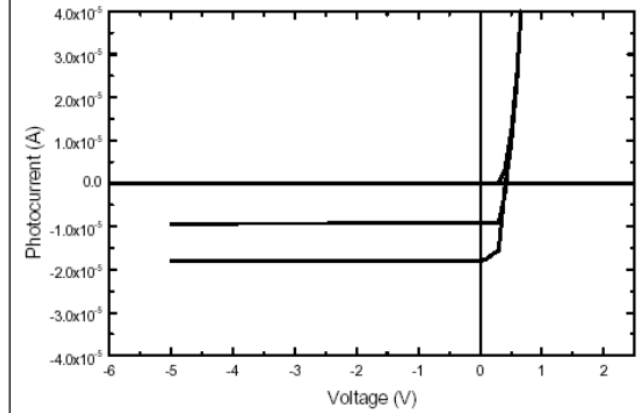


Fig. 3 Typical Breakdown Curve

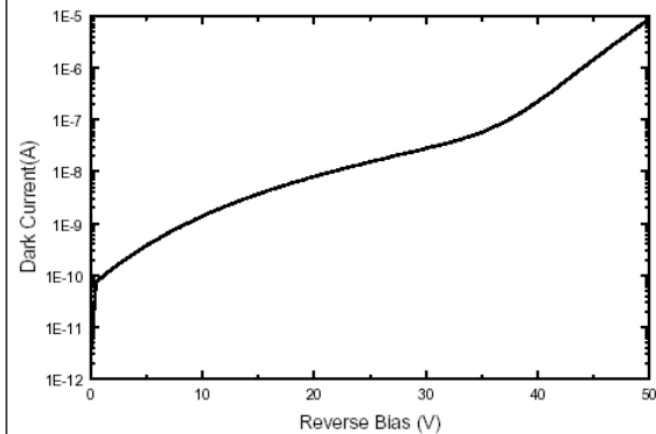
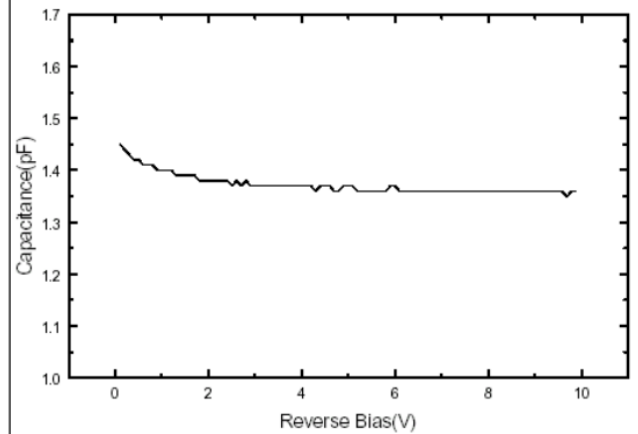
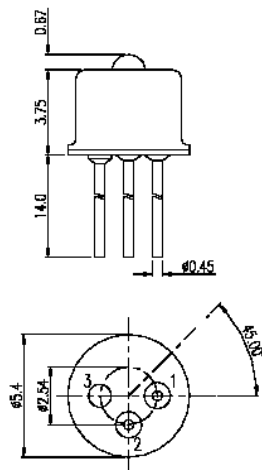


Fig. 4 Typical C-V Curve



Outline Dimensions (unit: mm)



- Pinout
 1. Anode
 2. Cathode
 3. NC

Note: Specifications are subject to change without notice.