



PDT-A85A30

GaAs PIN Photodiode in TO-46 Package for 850nm Emitter

Overview

The Lasermate PDT-A85A30 is a low dark current, low capacitance, >1.5GHz bandwidth, GaAs photodiode in TO-46 package designed for use in fiber optic data communication applications.



Features

- Industry standard TO-46 package with cap lens
- High coupling efficiency to multi-mode fibers directly
- Low dark current
- Low capacitance

Applications

- Optimized for fiber optic application
- Bandwidth >1.5 GHz

Specifications

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

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity ⁽¹⁾	R	0.50	0.60	-	A/W	V _R =5V, λ=850 nm
Dark Current	I _D	-	-	2	nA	V _R =5V, T _A =25°C
Breakdown Voltage	V _{BD}	50	-	-	V	I _R =10uA
Bandwidth	BW	1.5			GHz	V _R =5V
Capacitance ⁽²⁾	C	-	1.2	1.5	pF	V _R =5V, f=1 MHz

Notes:

1. The responsivity is measured with a receptacle package, using an 850 nm VCSEL as the optical light source to the 50/125 or 62.5/125um multi-mode fibers.
2. Sensitive area is typical 120um in diameter.

Typical Characteristics

Figure 1: Typical Dark Current vs. Forward Current

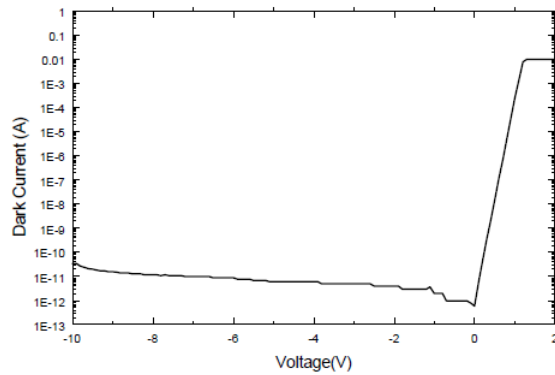


Figure 2: Typical Photo-Current

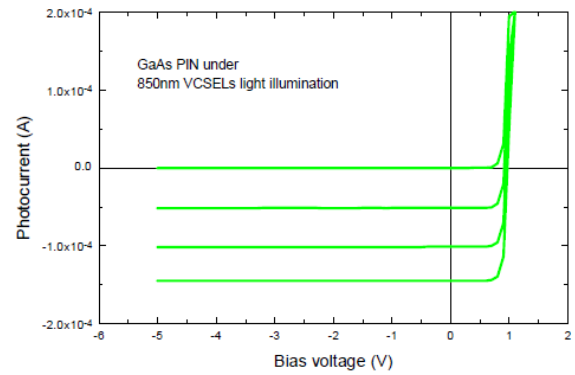


Figure 3: Typical Breakdown Curve

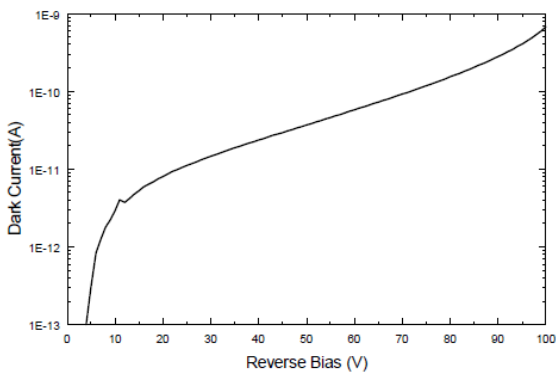
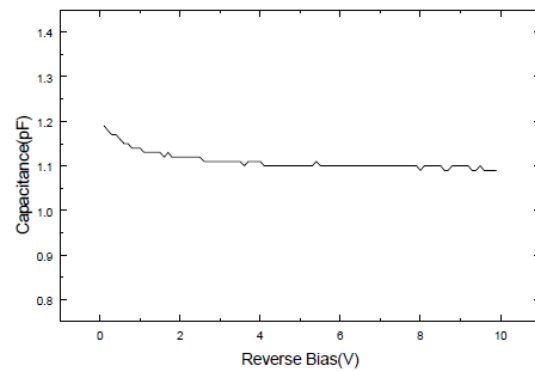
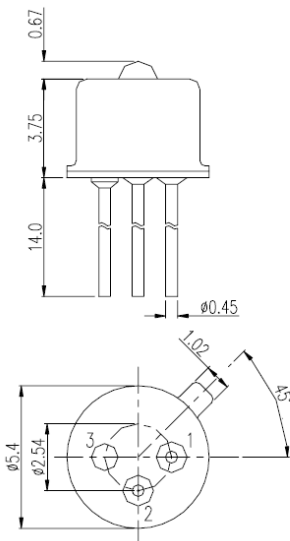


Figure 4: Typical C-V Curve



Outline Dimensions (unit: mm)



Pinout
1. Anode
2. Cathode
3. NC

Note: Specifications are subject to change without notice.