

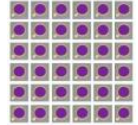


## PDC-13A300

### 300um Active Area InGaAs PIN Photodiode Chip

#### Overview

The Lasermate PDC-13A300 is a 300um active area InGaAs photodiode chip designed for use in monitor applications.



#### Features

- InGaAs PIN photodiode chip
- Dia. 300 $\mu$ m Active area
- Low dark current
- Low capacitance

#### Applications

- Optimized for monitor optic application

#### Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Forward current		10	mA	
Reverse current		2	mA	
Reverse voltage		20	V	
Optical power		2	mW	
ESD	500		V	

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.8	1.0		A/W	$V_R=5V, \lambda=1300nm$ at 25°C
		0.9	1.1			$V_R=5V, \lambda=1550nm$ at 25°C
Dark current	$I_D$		0.3	1	nA	$V_R=5V$ at 25°C
Breakdown voltage	$V_{BD}$	25	35		V	$I_R=1\mu A$
Capacitance	C		6	10	pF	$V_R=5V, f=1MHz$

## Typical Characteristics

Fig. 1 Typical Dark Current vs. Forward Current

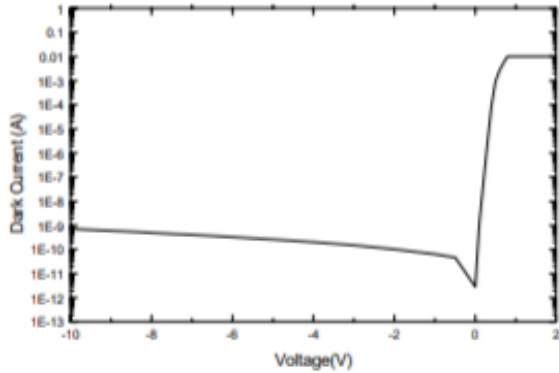


Fig. 2 Typical Photo-Current

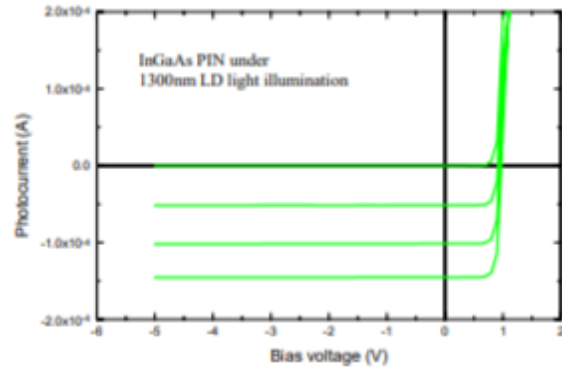


Fig. 3 Typical Breakdown Curve

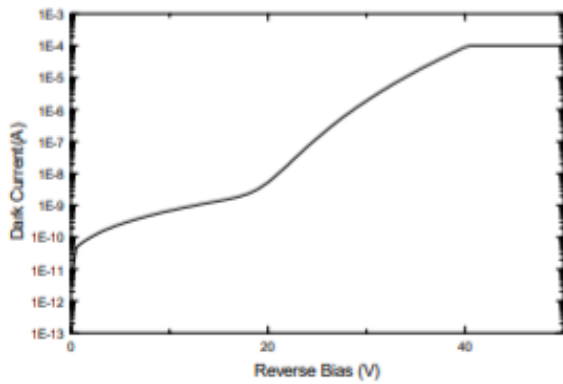
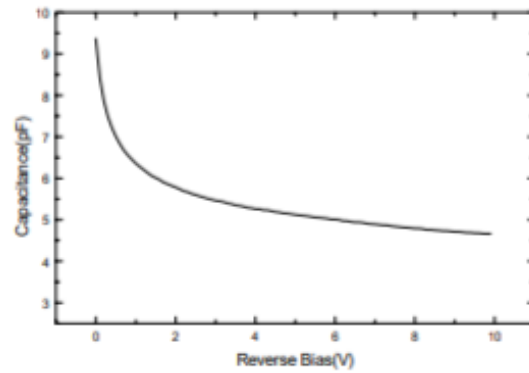
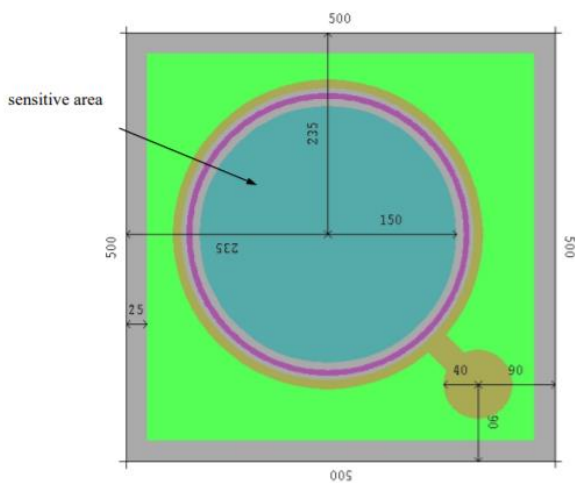


Fig. 4 Typical C-V Curve



## Outline Diagram



- Chip size: 500µm x 500µm ±30µm typical
- Chip thickness: 200µm ±30µm
- Sensitive area: Typical 300µm ±5µm in diameter

Note: Specifications are subject to change without notice.