

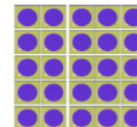


## PDC-13A3000

### 3mm Active Area InGaAs PIN Photodiode Chip

#### Overview

The Lasermate PDC-13A3000 is a 3mm diameter active area InGaAs photodiode chip designed for use in monitor applications.



#### Features

- 1310nm/1550nm InGaAs PIN photodiode chip
- Dia. 3.0mm 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	

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.8	0.9		A/W	$V_R = 5V, \lambda = 1310nm$
		0.9	1.0			$V_R = 5V, \lambda = 1550nm$
Dark current	$I_D$		5	30	nA	$V_R = 5V$
Breakdown voltage	$V_{BD}$	5	25		V	$I_R = 1\mu A$
Shunt resistance	$R_{sh}$	15			MΩ	$V_R = 10mV$
Capacitance	C		1000	1300	pF	$V_R = 0V, f = 1MHz$

## Typical Characteristics

Fig. 1 Typical Photo Current

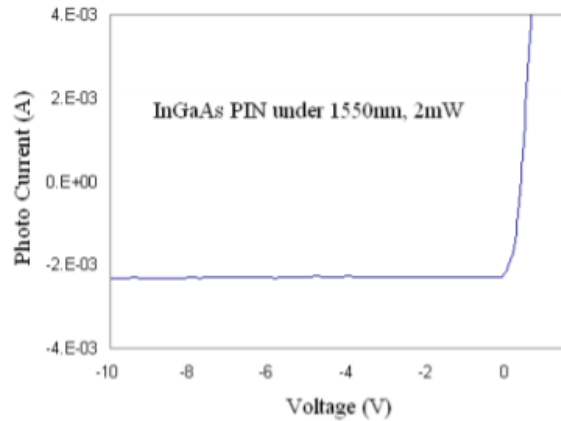


Fig. 2 Typical Reverse I-V Curve

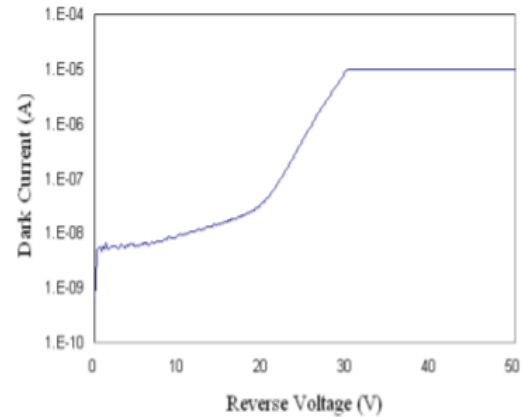
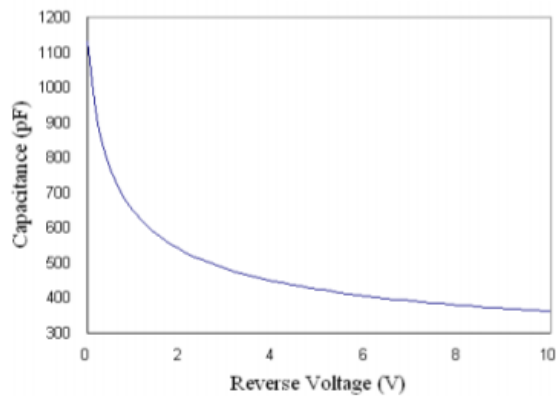
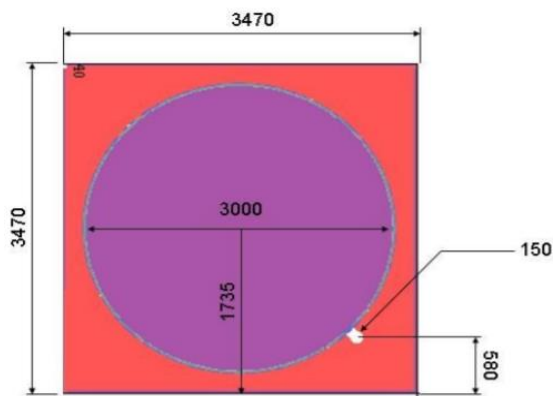


Fig. 3 Typical C-V Curve



## Outline Diagram



- Chip size: 3.47mm x 3.47mm square typical
- Chip thickness: 200 $\mu$ m  $\pm$ 30 $\mu$ m
- Sensitive area: Typical 3mm in diameter

Note: Specifications are subject to change without notice.