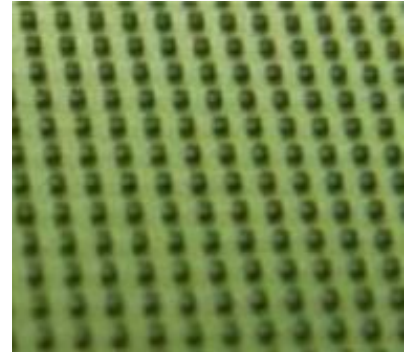


## 2.5Gbps 850nm GaAs PIN Photodiode Chip

Part No. PDC-85A2G

### Features

- 850nm GaAs PIN photodiode chip
- Data rate: 2.5Gbps
- High responsivity at 850nm
- Optimized for 2.5G fiber optic application
- Low dark current and low capacitance
- Non-hermetic design



### Specifications

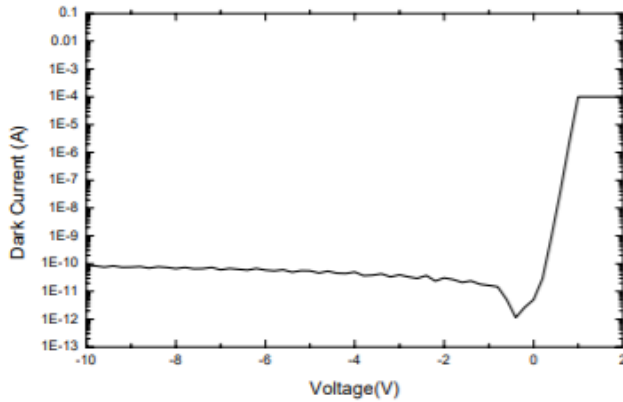
Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Reverse current		2	mA	
Forward current		10	mA	
Reverse voltage		20	V	

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.55	0.65		A/W	$V_R = 5V, \lambda = 850nm$
Dark current	$I_D$		0.2	1	nA	$V_R = 5V$
Breakdown voltage	$V_{BD}$	50			V	$I_R = 10\mu A$
Capacitance	C		0.70	0.90	pF	$V_R = 1.2V, f = 1MHz$
Bandwidth	BW	1.9			GHz	$V_R = 5V$

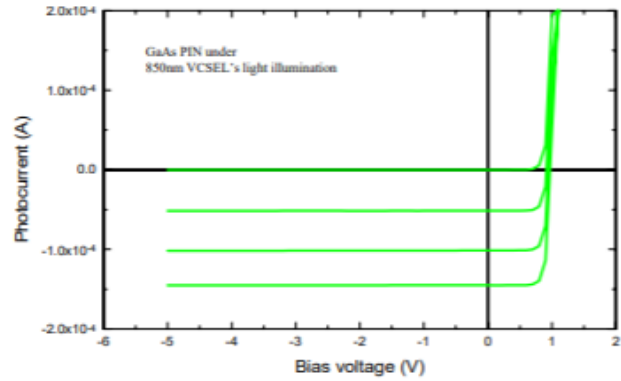


## Typical Characteristics

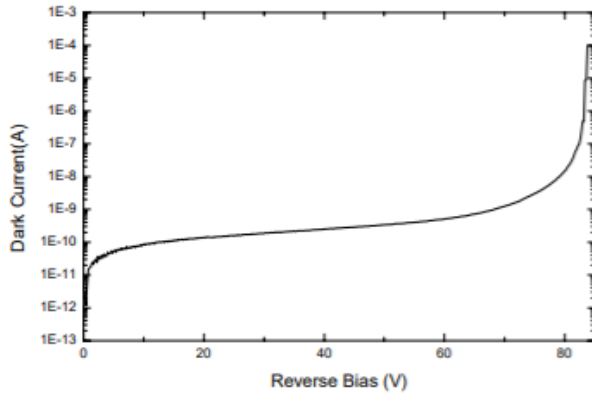
Typical Dark Current vs. Forward Current



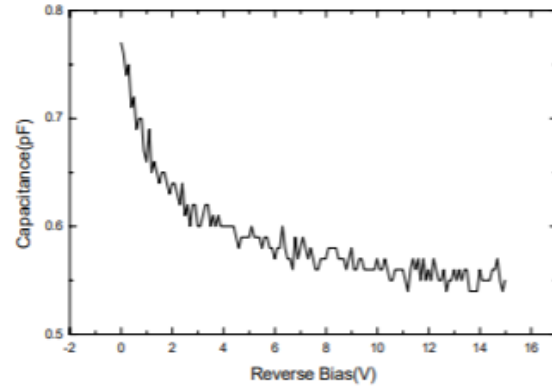
Typical Photo-Current



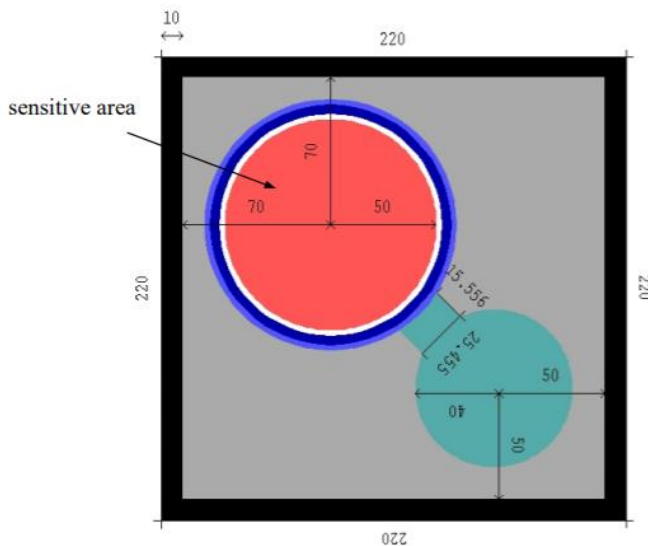
Typical Breakdown Curve



Typical C-V Curve



## Outline Diagram



- Chip size: 220µm x 220µm typical
- Chip thickness: 200µm ±12.5µm
- Sensitive area: Typical 100µm in diameter

Note: Specifications are subject to change without notice.

**Lasermate Group, Inc.**

19608 Camino De Rosa, Walnut, CA 91789, USA

Tel: (909)718-0999 | Fax: (909)718-0998 | E-mail: [info@lasermate.com](mailto:info@lasermate.com) | URL: <http://www.lasermate.com>