



## PDA4-85A25G

### 25Gbps GaAs PIN Photodiode 1x4 Chip Array

#### Overview

The Lasermate PDA4-85A25G is 25Gbps, GaAs photodiode chip array designed for use in fiber optic data communication applications.



#### Features

- 1x4 array bar with 250um pitch
- High responsivity at 850nm
- Optimized for fiber optic application
- Low dark current and low capacitance
- Non-hermetic design

#### Applications

- High speed Data communications
- Gigabit ethernet
- Fiber channel

#### Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Reverse Current		2	mA	T=25°C
Forward Current		10	mA	T=25°C
Reverse Voltage		20	V	T=25°C

Electro-Optical Characteristics (T <sub>a</sub> =25°C unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.55	0.6		A/W	V <sub>R</sub> =2V, λ=850nm
Dark Current	I <sub>D</sub>		0.1	1.0	nA	V <sub>R</sub> =5V
Breakdown Voltage	V <sub>B</sub>	30			V	I <sub>r</sub> =10uA
Capacitance	C		0.1	0.12	pF	V <sub>R</sub> =2V, f=1MHz
Bandwidth	BW		17		GHz	V <sub>R</sub> =2V

## Typical Characteristics

Fig. 1 Typical Dark Current and Forward Current

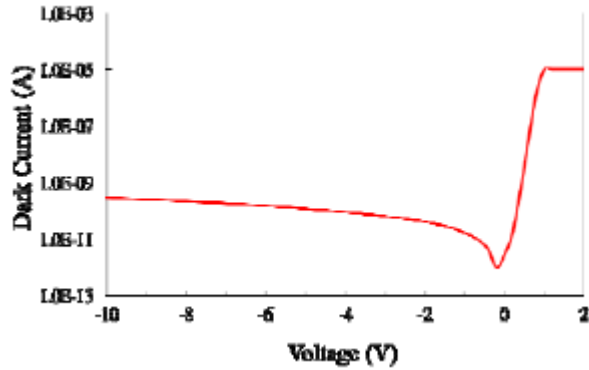


Fig. 2 Typical Photo Current

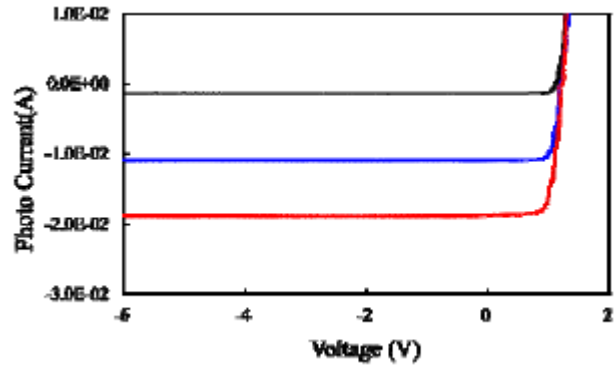


Fig. 3 Typical Breakdown Curve

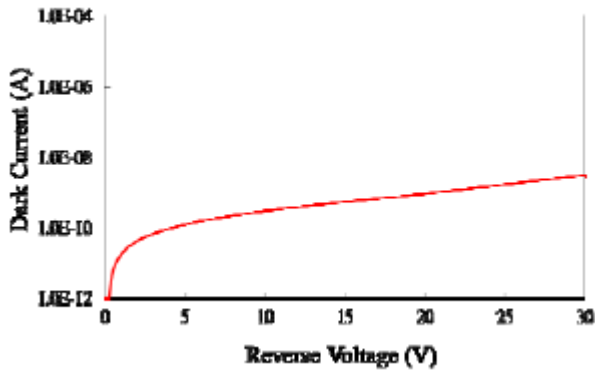
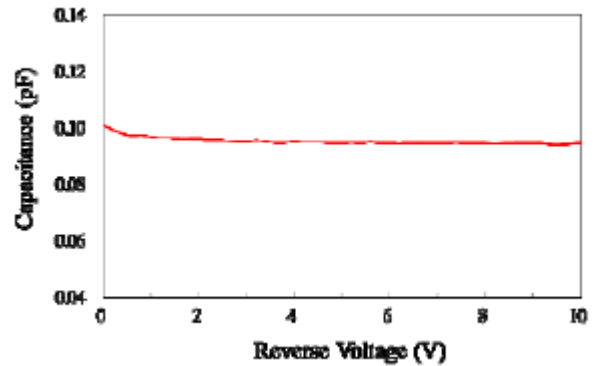
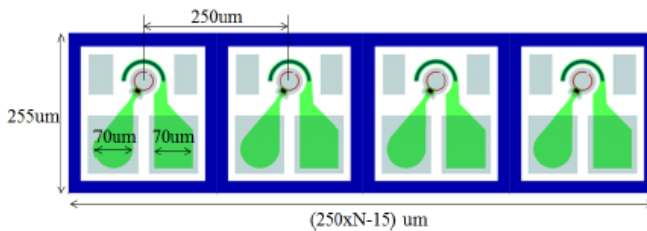


Fig. 4 Typical C-V Curve



## Outline Dimensions (unit: mm)



- Chip size is typical 985um x 255um.
- Chip thickness is 150±12.5um.
- Sensitive area is typical 40um in diameter.

Note: Specifications are subject to change without notice.