

10Gbps 850nm GaAs PIN Photodiode Chip

Part No. PDC-85C10G

Features

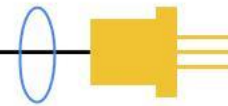
- 850nm GaAs PIN photodiode chip
- Data rate: 10Gbps
- High responsivity at 850nm
- Optimized for fiber optic application
- Low dark current and low capacitance
- Non-hermetic design



Specifications

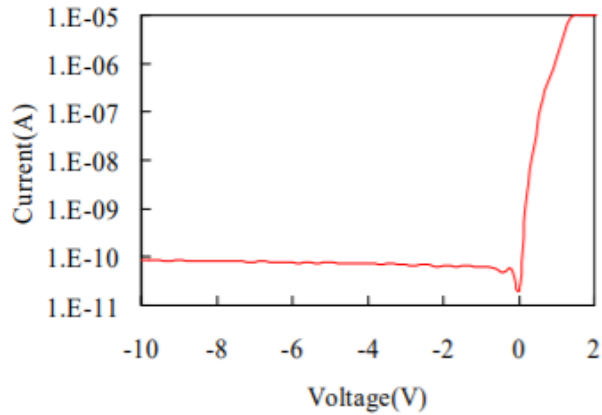
Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Reverse current		2	mA	T = 25°C
Forward current		10	mA	T = 25°C
Reverse voltage		20	V	T = 25°C

Electro-Optical Characteristics (T = 25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.55	0.65		A/W	V _R = 1.5V, λ = 850nm
Dark current	I _D		0.1	1	nA	V _R = 5V
Breakdown voltage	V _{BD}	50			V	I _R = 10μA
Capacitance	C		0.22	0.25	pF	V _R = 1.5V, f = 1MHz
			0.20	0.23		V _R = 5V, f = 1MHz
Bandwidth	BW		9		GHz	V _R = 1.5V

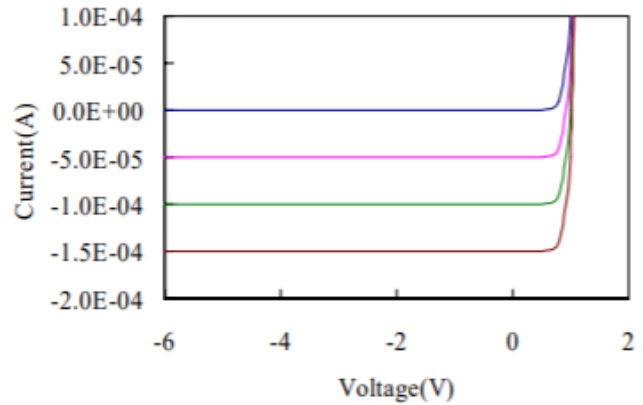


Typical Characteristics

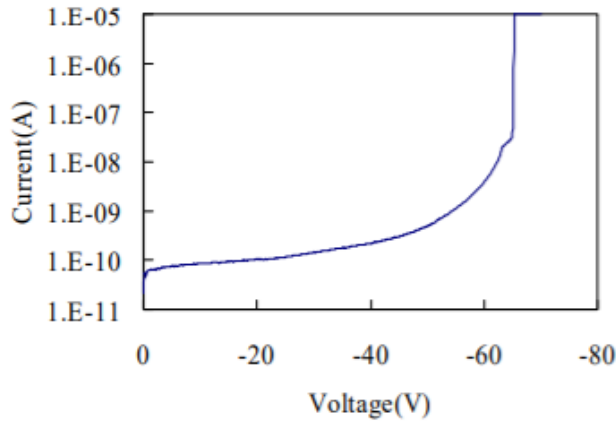
Typical Dark Current vs. Forward Current



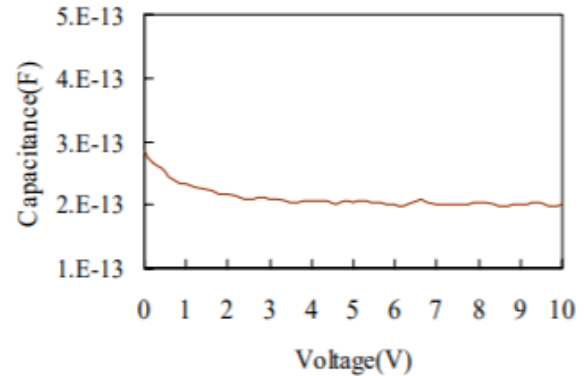
Typical Photo-Current



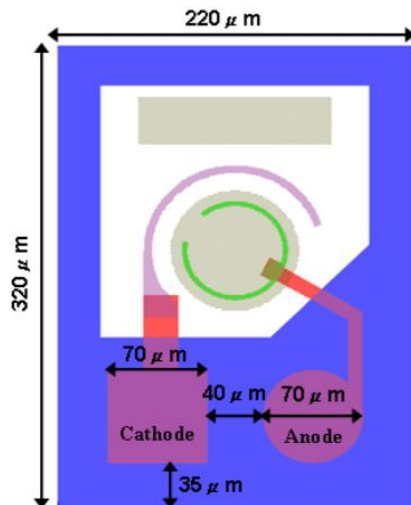
Typical Breakdown Curve



Typical C-V Curve



Outline Diagram



- Chip size: 220μm x 320μm typical
- Chip thickness: 200μm ±12.5μm
- Sensitive area: Typical 70μm 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 | URL: <http://www.lasermate.com>