



25Gbps 850nm GaAs PIN Photodiode Chip

Part No. PDC-85A25G

Features

- 850nm GaAs PIN photodiode chip
- Data rate: 25Gbps
- High responsivity at 850nm
- Optimized for fiber optic application
- Low dark current and low capacitance
- Planarized and non-hermetic design

Specifications

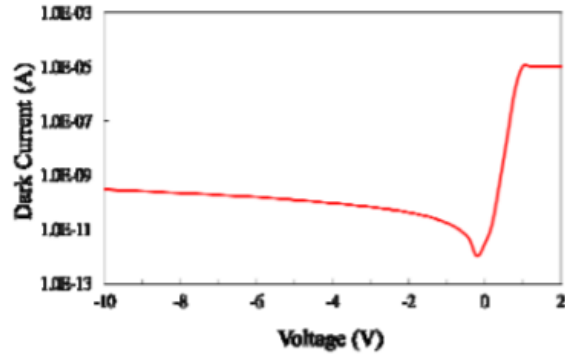
Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage temperature	-40	100	°C	
Operating temperature	-40	85	°C	
Reverse current		2	mA	T = 25°C
Forward current		10	mA	T = 25°C
Reverse voltage		20	V	T = 25°C

Electro-Optical Characteristics (T = 25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.55	0.65		A/W	V _R = 2V, λ = 850nm
Dark current	I _D		0.1	1	nA	V _R = 5V
Breakdown voltage	V _{BD}	30			V	I _R = 10μA
Capacitance	C		0.1	0.12	pF	V _R = 2V, f = 1MHz
Bandwidth	BW		17		GHz	V _R = 2V

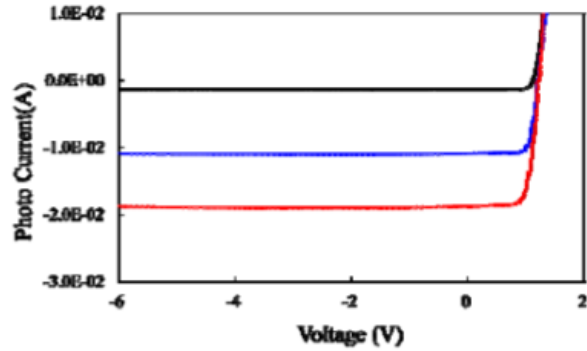


Typical Characteristics

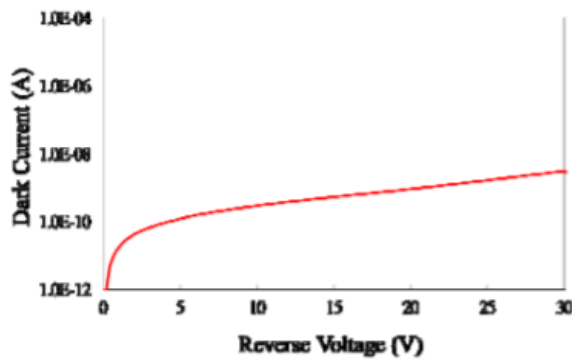
Typical Dark Current vs. Forward Current



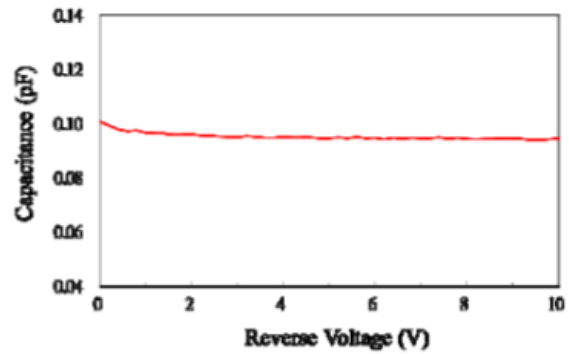
Typical Photo-Current



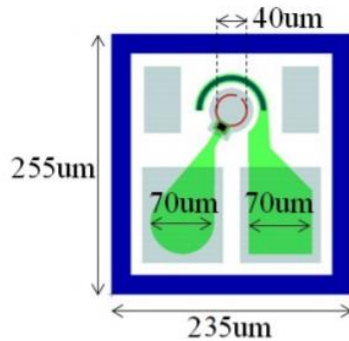
Typical Breakdown Curve



Typical C-V Curve



Outline Diagram



- Chip size: 235µm x 255µm typical
- Chip thickness: 150µm ±12.5µm
- Sensitive area: Typical 40µm in diameter

Note: Specifications are subject to change without notice.