25Gbps InGaAs PIN Photodiode Chip
PDC-13A25G

Data Sheet

Features

- InGaAs PIN photodiode chip
- Data rate: 25Gbps
- Optimized for fiber optic application
- High responsivity at 1310nm
- Low capacitance
- Low dark current

Specifications

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

Electro-Optical Characteristics (T=25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active diameter	Φ		20		um	
Responsivity	R	0.9	1		A/W	V_R=2V, λ=1310nm
Dark current	I_D			1	nA	V_R=2V
Breakdown voltage	V_{BD}	25			V	I_R=10μA
Capacitance	C		100		fF	V_R=2V, f=1MHz
Bandwidth	BW		18		GHz	V_R=2V

Typical Characteristics

Fig. 1 Typical I-V Curve

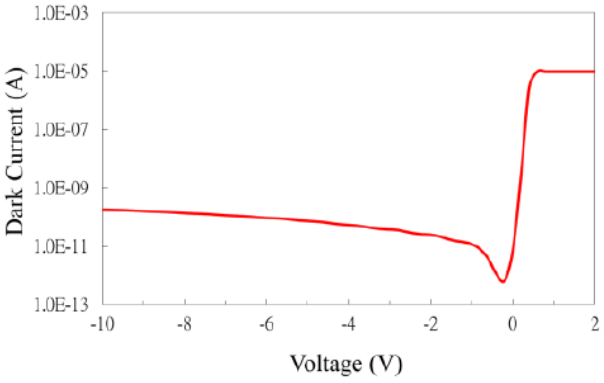
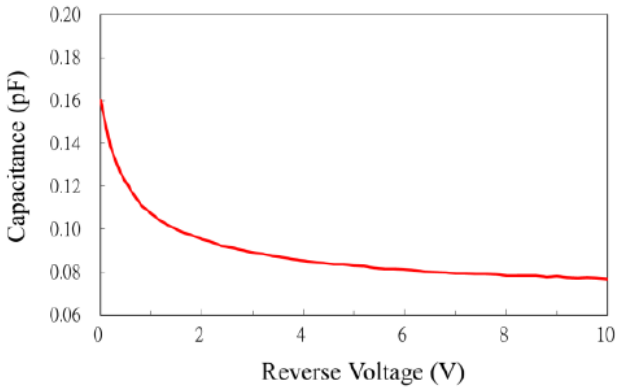
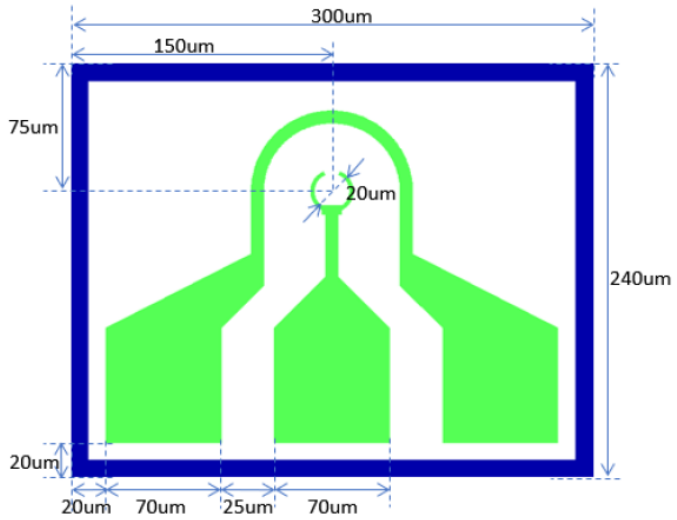


Fig. 2 Typical C-V Curve



Outline Diagram



- Chip size: 300μm x 240μm typical
- Chip thickness: 150μm ±12.5μm
- Sensitive area: Typical 20μm in diameter

Note: Specifications are subject to change without notice.