



PDC-85A14G 14Gbps GaAs PIN Photodiode Chip

Overview

The Lasermate PDC-85A14G is a low dark current, low capacitance GaAs photodiode chip designed for use in high speed 14Gbps fiber optic data communication applications.



Features

- GaAs PIN photodiode chip
- Two top-side wire bond pads
- AR coated for 850nm
- Data rate up to 14Gbps
- Low dark current and low capacitance

Applications

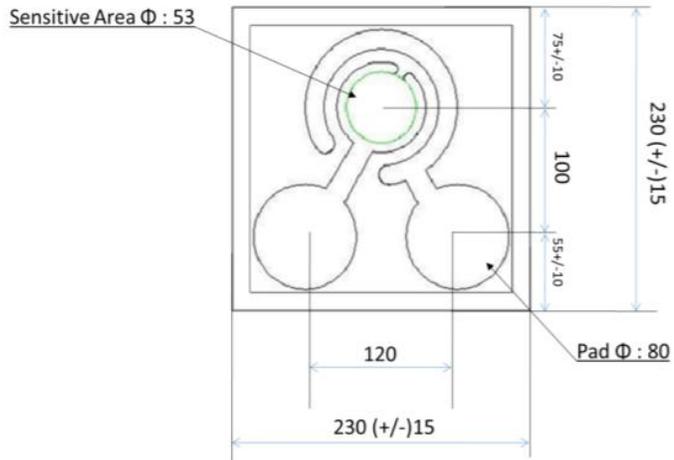
- High speed data communications
- Fiber channel
- Gigabit ethernet
- Parallel optical interconnects

Specifications

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

Electro-Optical Characteristics (T = 25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive area	D		53		μm	In diameter
Responsivity	R		0.6		A/W	V _R = 1.6V, λ = 850nm
Dark current	I _D			1.0	nA	V _R = 2V
Breakdown voltage	V _{BD}	20			V	I _R = 1μA
Capacitance	C		0.20		pF	V _R = 3V, f = 1MHz
Peak wavelength	λ		850		nm	

Outline Diagram (unit: μm)



- Die height: $150 \pm 15 \mu\text{m}$
- Sensitive area: Typical $53 \mu\text{m}$ in diameter

Additional Notes

- The inherent design of this component causes it to be sensitive to electrostatic discharge (ESD). To prevent ESD-induced damage and/or degradation to equipment, please take normal ESD precautions when handling this product.
- Specifications are subject to change without notice.