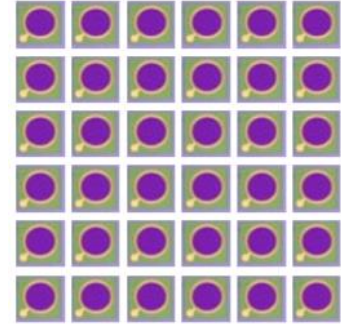


1260-1620nm InGaAs PIN Photodiode Chip, Dia. 300um Active Area

Part No. PDC-13A300

Features

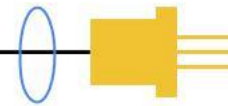
- 1260nm~1620nm InGaAs PIN photodiode chip
- Dia. 300 μ m Active area
- Optimized for monitor application
- Low dark current and low capacitance



Specifications

| Absolute Maximum Ratings | | | | |
|--------------------------|------|------|------|------------|
| Parameters | Min. | Max. | Unit | Conditions |
| Storage temperature | -40 | 100 | °C | |
| Operating temperature | -40 | 85 | °C | |
| Forward current | | 10 | mA | |
| Reverse current | | 2 | mA | |
| Reverse voltage | | 20 | V | |
| Optical power | | 2 | mW | |
| ESD | 500 | | V | |

| Electro-Optical Characteristics | | | | | | |
|---------------------------------|----------|------|------|------|------|----------------------------------|
| Parameters | Symbol | Min. | Typ. | Max. | Unit | Conditions |
| Responsivity | R | 0.8 | 1.0 | | A/W | $V_R=5V, \lambda=1300nm$ at 25°C |
| | | 0.9 | 1.1 | | | $V_R=5V, \lambda=1550nm$ at 25°C |
| Dark current | I_D | | 0.3 | 1 | nA | $V_R=5V$ at 25°C |
| Breakdown voltage | V_{BD} | 25 | 35 | | V | $I_R=1\mu A$ |
| Capacitance | C | | 6 | 10 | pF | $V_R=5V, f=1MHz$ |



Typical Characteristics

Fig. 1 Typical Dark Current vs. Forward Current

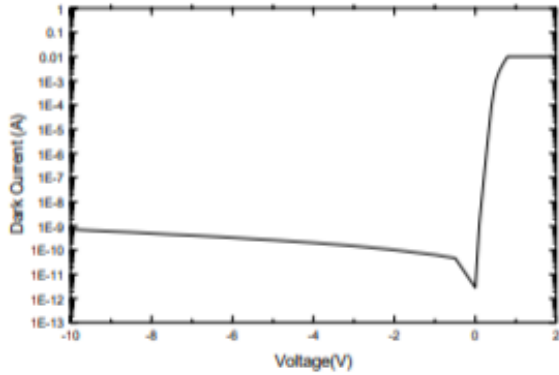


Fig. 2 Typical Photo-Current

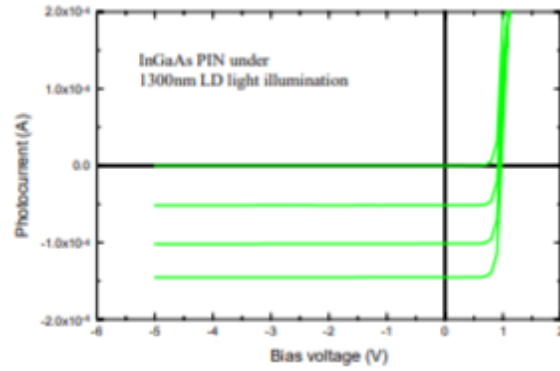


Fig. 3 Typical Breakdown Curve

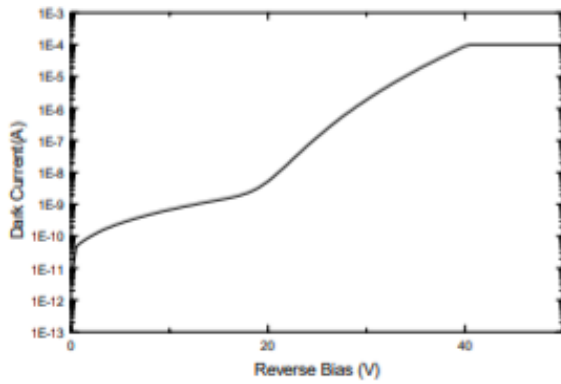
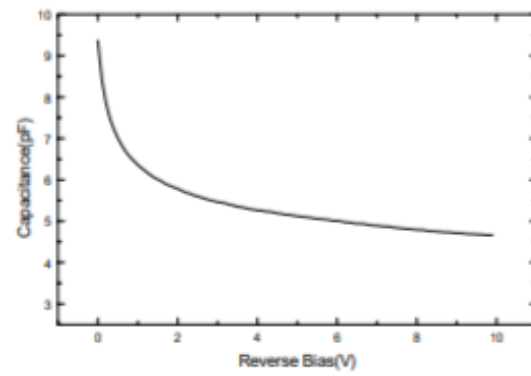
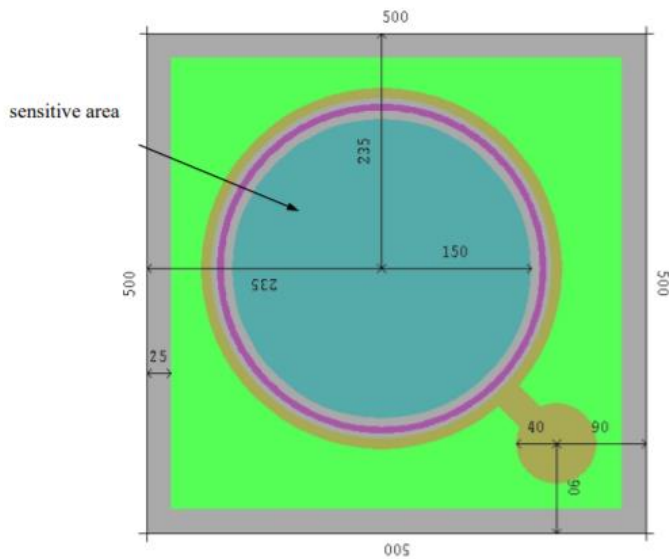


Fig. 4 Typical C-V Curve



Outline Diagram



- Chip size: 500µm x 500µm ±30µm typical
- Chip thickness: 200µm ±30µm
- Sensitive area: Typical 300µm ±5µm in diameter

Note: Specifications are subject to change without notice.