

InGaAs Photodiodes

KPDE0301M51

Characteristics

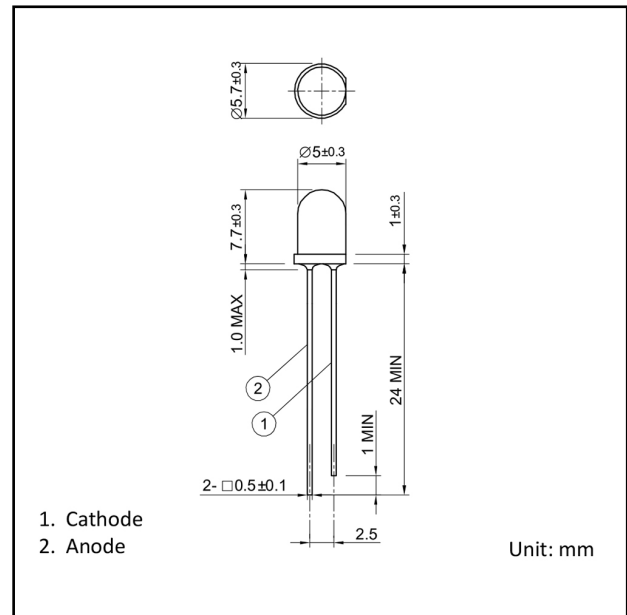
- NIR sensitive up to 1700nm
- Plastic mold package
- Various package option
- (Ceramic, Metal stem, TO-CAN)

Applications

- Optical switches
- Sensors and industrial controls

Package

- MOLD



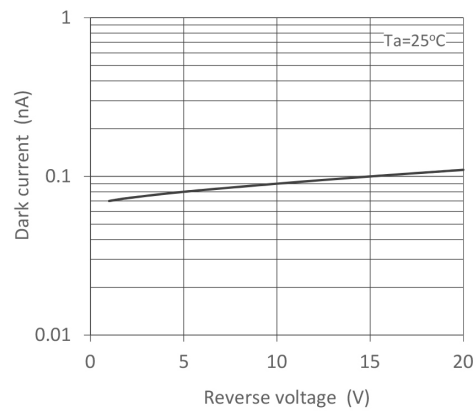
Absolute Maximum Ratings

| Parameter | Symbol | Value | Unit | Conditions |
|-----------------------|-----------|-------------|------|------------------------|
| Reverse voltage | V_R | 20 | V | - |
| Reverse Current | I_R | 0.5 | mA | - |
| Forward current | I_F | 50 | mA | - |
| Operating temperature | T_{opr} | -20 to +80 | | Avoid dew condensation |
| Storage temperature | T_{stg} | -30 to +100 | | Avoid dew condensation |

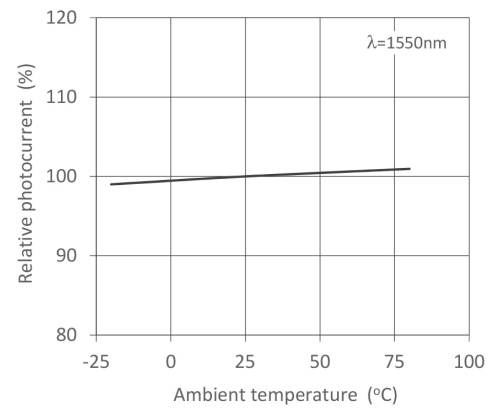
Electrical and Optical characteristics (Ta=25 unless otherwise noted)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|----------------------|--------|------|------|------|---------------|-----------------|
| Active area | S | - | 300 | - | μm | - |
| Sensitive wavelength | | 900 | - | 1700 | nm | - |
| Responsivity | R | - | 0.9 | - | A/W | =1550nm |
| Dark current | I_D | - | - | 1 | nA | $V_R=5V$ |
| Terminal capacitance | C_t | - | 4 | 6 | pF | $V_R=5V$ f=1MHz |

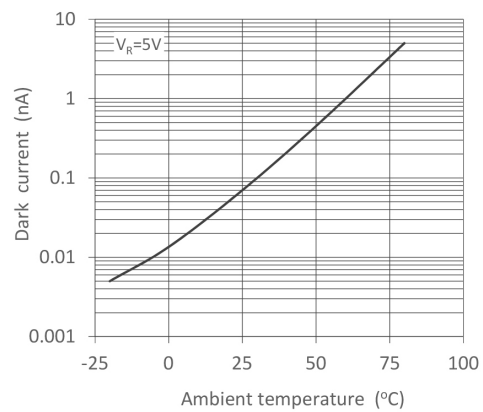
Dark Current - Reverse Voltage



Photocurrent - Ambient Temperature



Dark Current - Ambient Temperature



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Dexerials Corporation

1724 Shimotsuboyama, Shimotsuke-shi, Tochigi 323-0194, Japan

TEL: +81-285-39-7950 <https://www.dexerials.jp/en/>