



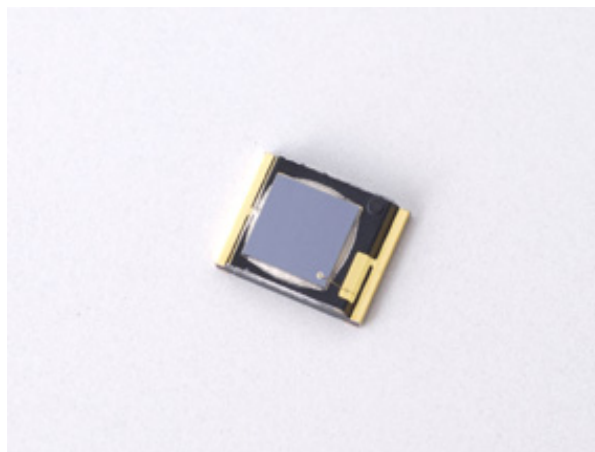
Products

- ▶ Optical Communication
 - ↳ InGaAs Photodiodes
 - ↳ 10GBASE-LRM InGaAs Photodiode Chip
 - ↳ InGaAs 10Gbps Photodiode Chip
 - ↳ Flip-Chip type InGaAs Photodiode
 - ↳ Edge Illuminated type InGaAs Photodiode
 - ↳ InGaAs ROSA with FPC
 - ↳ InGaAs PD-TIA Receivers
 - ↳ GaAs Photodiode
 - ↳ Silicon PD-TIA Receiver
 - ↳ GaAs PD & PD-TIAs
 - ↳ Si PIN Photodiodes
 - ↳ Si PIN Photodiode Chips
 - ↳ Mini Can Si-PD
 - ↳ Laser diodes
 - ↳ VCSEL TOSA
 - ↳ Mini CanVCSEL
 - ↳ Packages
 - ↳ InGaAs Linear Array
- ▶ Optical Sensing and Control

LEDs and Detectors for Measurement, Control and Display

| LED | Plastic Mold LEDs | Si-PD | Si-PTr | Si-APD |

Si Photodiode KPD30S



Features

Transparent epoxy mold

High sensitivity

Applications

Optical switches

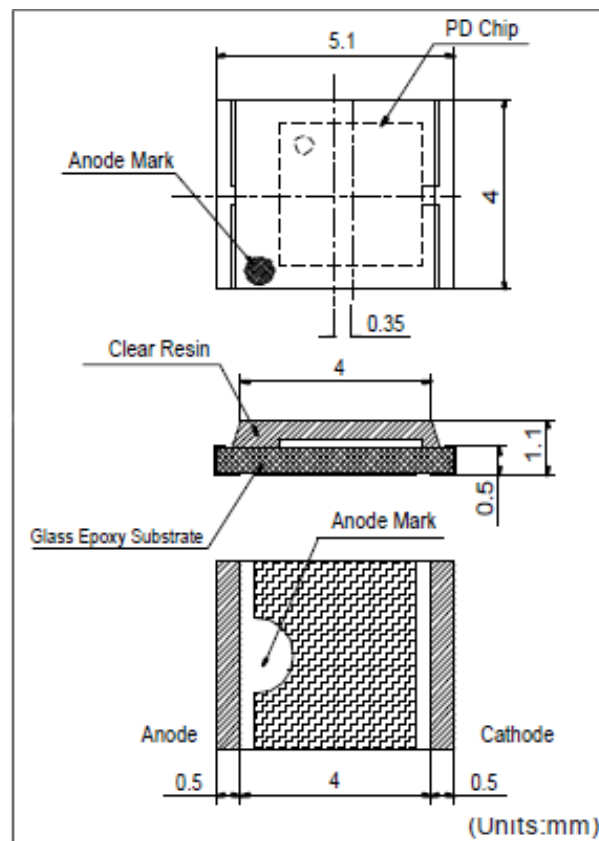
Optical encoders

Pulse detectors

Sensors and industrial controls

Maximum ratings

| Item | Symbol | Value | Units |
|-----------------------|-----------|---------------|-------|
| Reverse Voltage | V_R | 5 | V |
| Reverse Current | I_R | 1 | mA |
| Forward Current | I_F | 10 | mA |
| Operating Temperature | T_{op} | -25 ~ +80 | °C |
| Storage Temperature | T_{stg} | -25 ~ +100 | °C |
| Soldering Temperature | T_{sol} | 260(3sec max) | °C |



- ↳ LEDs
- ↳ Plastic Mold LEDs
- ↳ Si-PDs
- ↳ GaN UV Sensors
- ↳ Si-PTRs
- ↳ Si-APDs

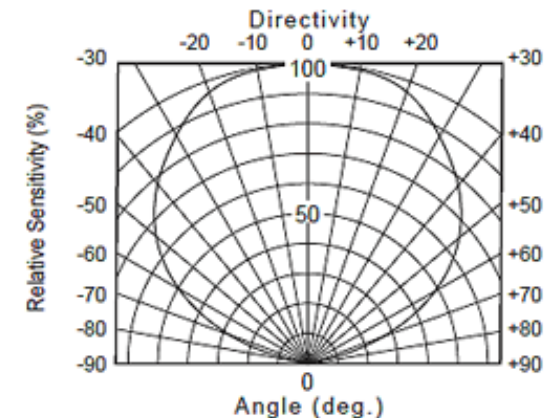
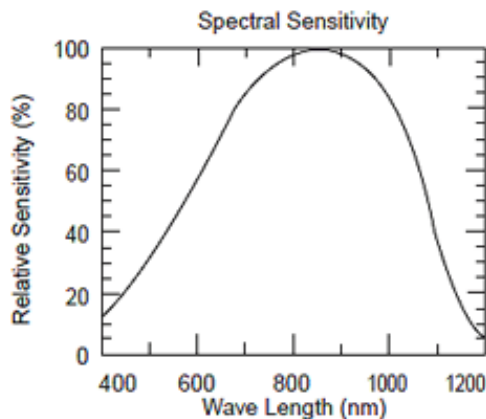
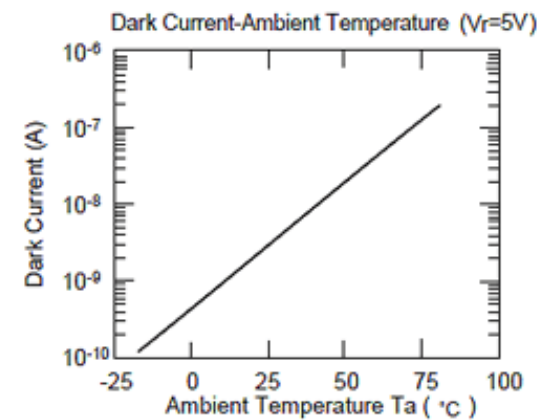
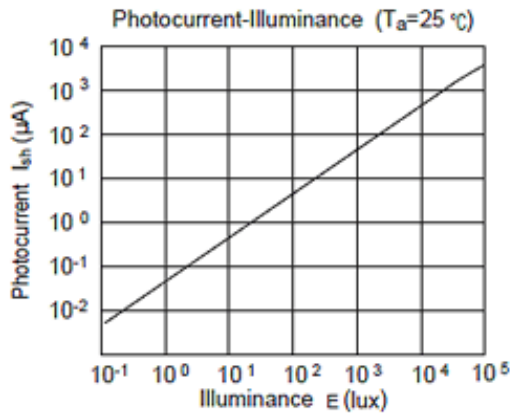
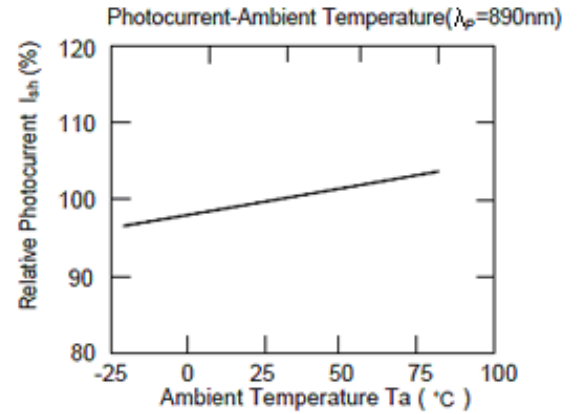
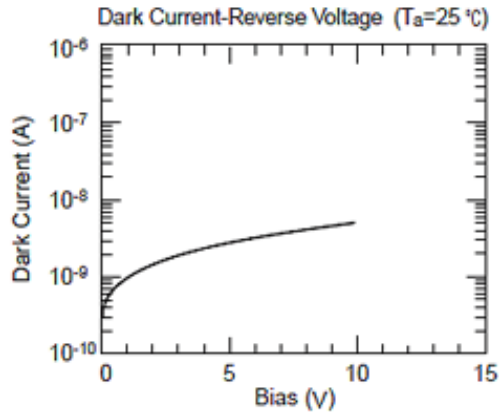
- ▶ Spherical Micro Solar Cell
- ↳ SphelarVoice™
- ↳ 12-cell Sphelar® module
- ↳ Dome type Sphelar® module



Characteristics (Ta=25 ° C unless otherwise noted.)

| Parameter | Symbol | Min. | Typ. | Max. | Units | Test Conditions |
|-----------------------|----------|------|---------------|------|---------|--------------------------|
| Active Area | S | | 2.59x 2.59 | | mm | |
| Operating Voltage | V_{R0} | | | 5 | V | |
| Sensitive Wavelength | | 400 | 850(ρ) | 1000 | nm | ρ = Peak wavelength |
| Open Circuit Voltage | V_{op} | | 350 | | mV | 1000lux(@2856K) |
| Short Circuit Current | I_{sh} | | 68 | | μ A | |
| Dark Current | I_d | | | 30 | nA | $V_R = 5V$ |
| Capacitance | C_t | | 30 | | pF | $V_R = 5V, f = 1MHz$ |
| Half angle | | | ± 60 | | deg | |

Typical Characteristics



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