

SPECIFICATION FOR APPROVAL

Customer Name :

Customer Item :

Part No. : PD-S554DF-LH90

Product Description :

Draw Date :

1.Accessory: **Samples** **Samples Data**

2.Customer's Proposal : **Agree** **Disagree**

Reason :



| Rev. | Draw by : | Checked by : | Approved by : |
|------------------|-------------|--------------|---------------|
| 1.2.1 | Steven Chen | Gray Huang | Caren |
| Customer Approve | | | |
| | | | |

■ Features

- Especially suitable for applications of 940nm
- Short switching time



■ Applications

- Optical module
- IR remote controls of various equipment

■ Absolute Maximum Ratings

(Ta= 25°C)

| Parameter | Symbol | Ratings | Unit |
|---------------------------|------------------|----------|------|
| Reverse Breakdown Voltage | BV _R | 30 | V |
| Junction Temperature | T _J | 150 | °C |
| Operating Temperature | T _{OPR} | -25 ~ 80 | °C |
| Storage Temperature | T _{STG} | -30 ~ 90 | °C |

■ Electro-Optical Characteristics

(Ta=25°C)

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|-----------------|-----------------------------|-----|------|------|------|
| Open Circuit Voltage | V _{OC} | E _v =1,000lux *1 | 0.3 | 0.32 | - | V |
| Short Circuit Current | I _{SC} | E _v =1,000lux *1 | - | 50 | - | μA |
| Dark Current | I _D | V _R =10V | - | 1 | 10 | nA |
| Capacitance | C _t | V=3V, f=1MHz | - | 30 | 50 | pF |
| Spectrum Sensitivity | λ | | 450 | - | 1100 | nm |
| Peak Sensing Wavelength | λ _P | | - | 905 | - | nm |

*1: Parallel light of 1,000lux illumination is applied by a tungsten lamp of 2856K

■ Typical electrical / Optical characteristic curves (Ta=25 °C)

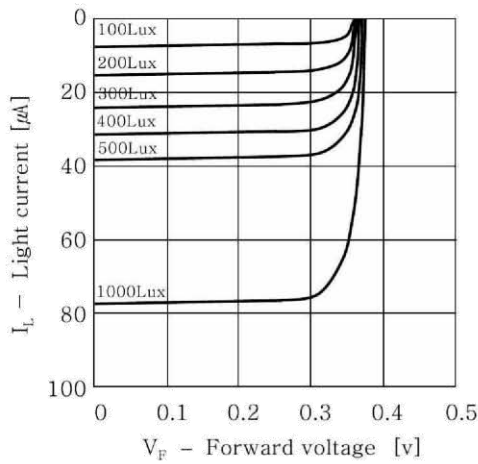


Fig.1 Light current vs. Forward voltage

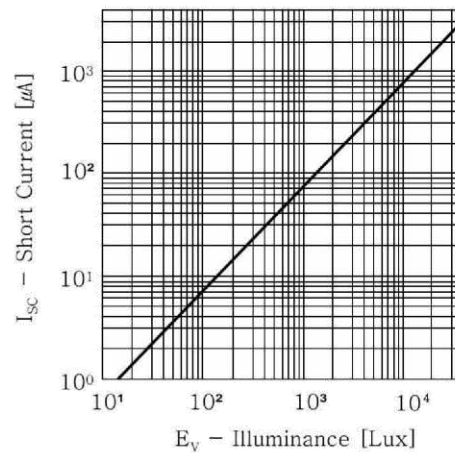


Fig.2 Short Current vs. Illuminance

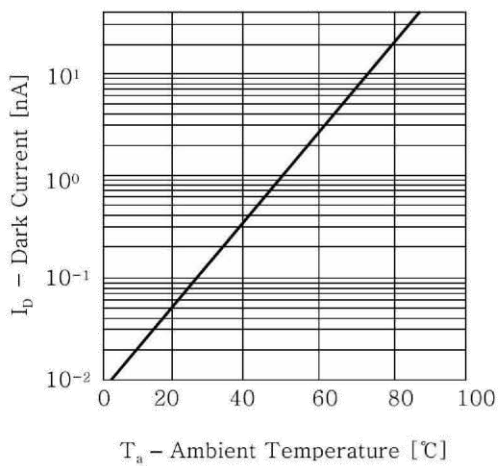


Fig.3 Dark current vs. Ambient temperature

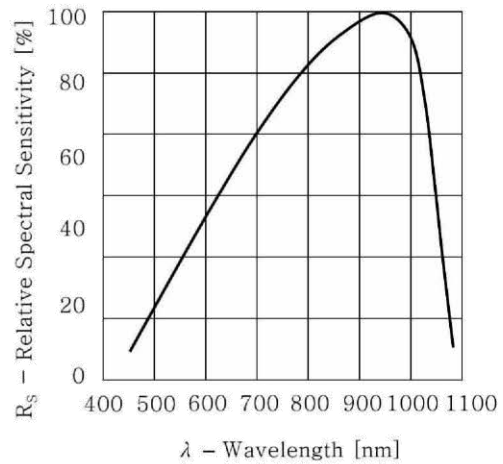


Fig.4 Relative spectral sensitivity vs. Wavelength

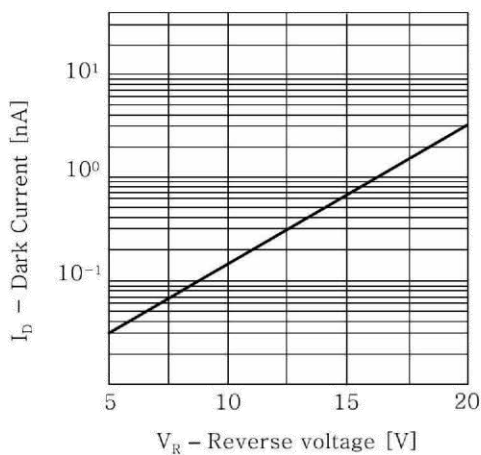
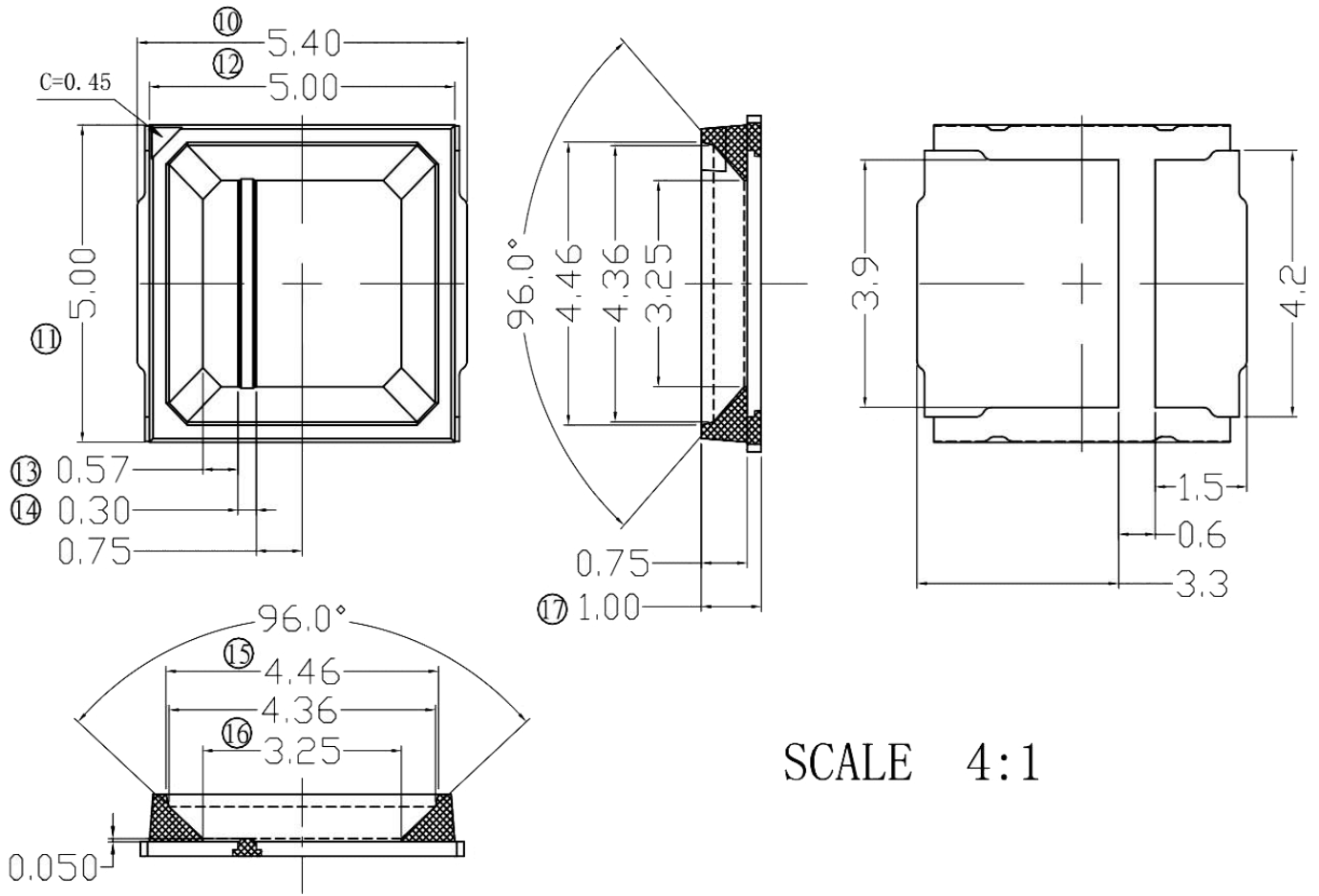


Fig.5 Dark current vs. Reverse voltage

■ Outline Dimensions

(Unit : mm)



SCALE 4:1

Note :

- 1、 Dimensions are in millimeters.
- 2、 Tolerances unless mentioned are $\pm 0.1\text{mm}$.

Storage and Soldering Condition

1. Do not open moisture proofs bag before the products are ready to use
2. Before opening the package, the LEDs should be kept at 30°C or less and 90% RH or less
3. The PDs should be used within a year.
4. After opening the package, the PDs should be kept at 30°C or less and 70% RH or less.
5. The PDs should be used within 168 hours (7 days) after opening the package.
6. When soldering, do not put stress on the PDs during heating.
7. If the moisture adsorbent material (silica gel) has fabled away or the PDs have exceeded the storage time, baking treatment should be performed using the following conditions. Baking treatment: 60±5°C for 24 hours
8. After soldering, do not warp the circuit board
9. Each terminal is to go to the tip of soldering iron temperature less than 260°C for 5 seconds within once in less than the soldering iron capacity 25W. Leave tow seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.