**SUPERFLUX LED LAMP**

# JZL-YO957C-D0P

# DATA SHEET

**DOCUMENT NO.:** **WI-RD-LDS- YO957C-D0P**

**RELEASE DATE:** **2007-04-03**

**VERSION:** **A/0**

# PART NO.: JZL- YO957C-D0P

## Features:

- ■ 3mm Superflux lamp
- ■ Lens color: WATER CLEAR
- ■ Emitting color:Orange
- ■ viewing angle: 40°
- ■ Leads with stand-offs: YES
- ■ RoHS compliant

## Application:

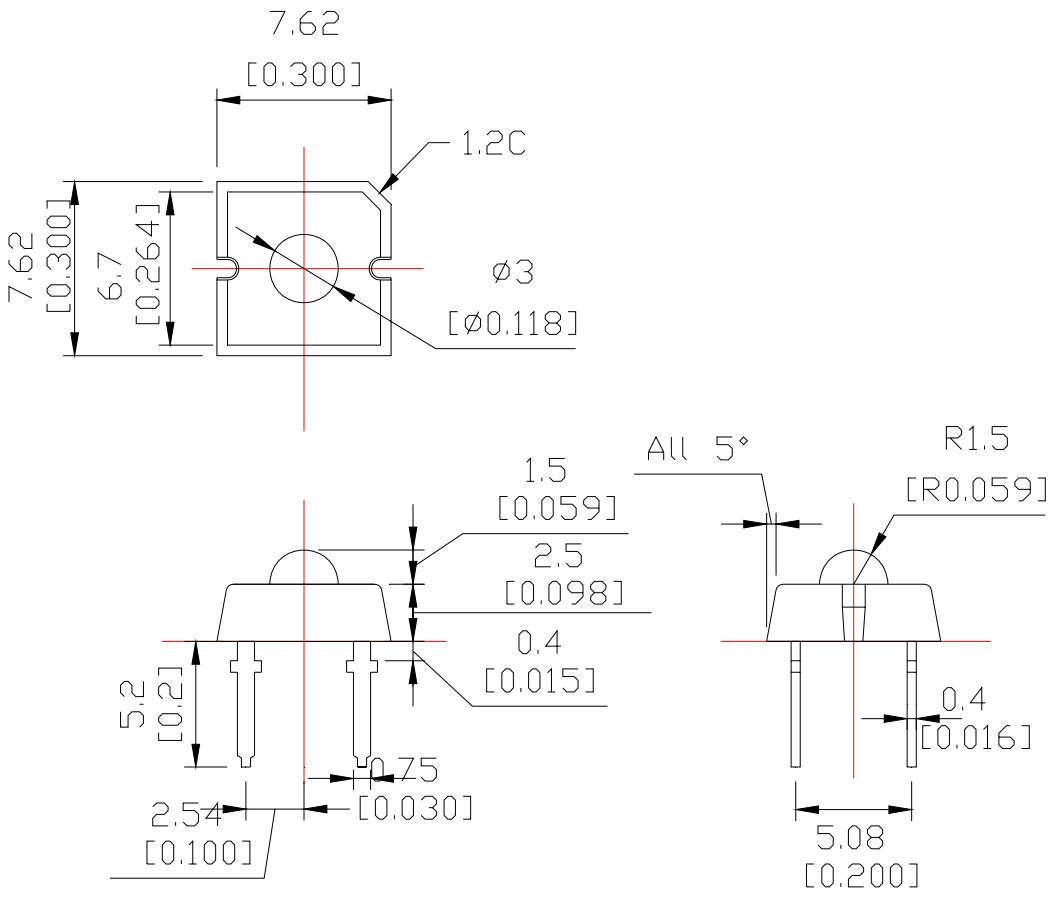
Indicator

Decoration

Lighting

others

## Package Dimensions




Notes:

1. All dimension are in millimeters and(Inch)tolerance is±0.25mm unless otherwise noted.
2.Specifications are subject to change without notice.

# PART NO.: JZL- YO957C-D0P

## Absolute Maximum Rating at=Ta=25℃

| | | |
|---|---|---|
| Power Dissipation | 70 | mW |
| Peak Forward Current<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | 120 | mA |
| Forward Current | 25 | mA |
| Operating Temperature Range | -30℃ to +85℃ | |
| Storage Temperature Range | -40℃ to +100℃ | |
| Lead Soldering Temperature<br>[3mm From Body] | 260℃ for 3 Seconds | |

## Electrical /Optical Characteristics at Ta=25℃

| Description | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage | VF | IF=20mA | 1.8 | 2.1 | 2.4 | V |
| Reverse Current | IR | VR=5V | / | / | 10 | μA |
| Dominant Wavelength | λD | IF=20mA | / | 605 | / | nm |
| Luminous Intensity | Iv | IF=20mA | / | 1500 | / | mcd |
| Half V-angle | 2θ1/2H-H | IF=20mA | / | 40 | / | deg |
| | 2θ1/2V-V | IF=20mA | / | / | / | deg |

1. Vf maximum tolerance for each bin limit is +/-0.1V.

2. Iv maximum tolerance for each bin limit is +/-15%.

3. λD maximum tolerance for each bin limit is +/-1nm.

**PART NO.: JZL-YO957C-D0P**

# Typical Optical-Electronic Characteristic Curves

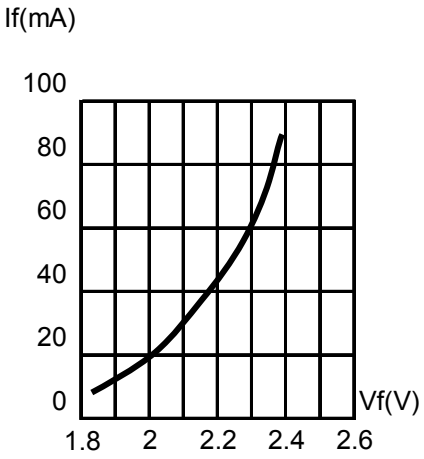



Fig.1 FORWARD CURRENT VS. FORWARD

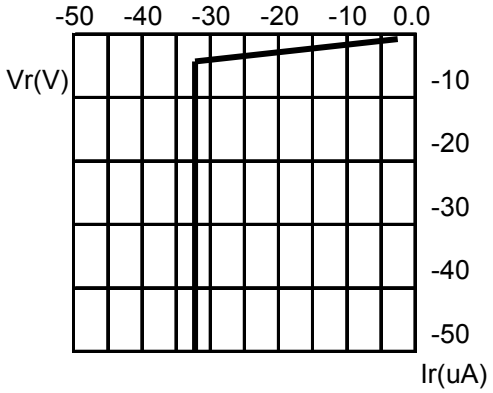



Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

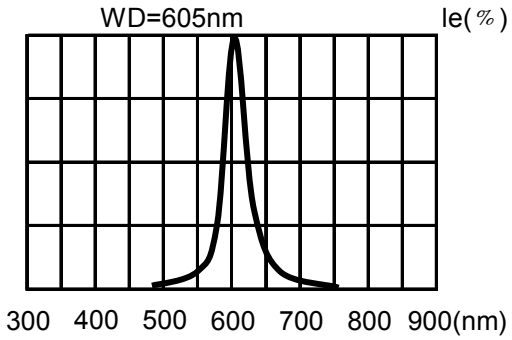
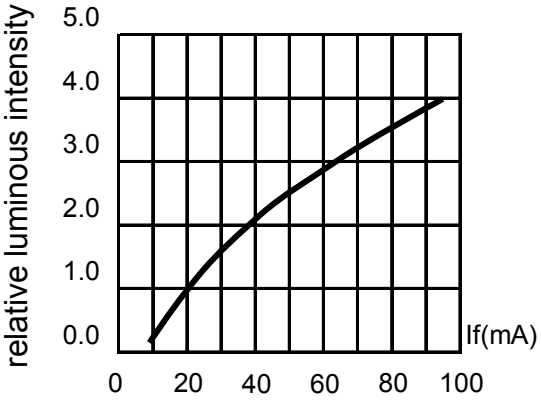



Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.




INTENSITY VS. FORWARD CURRENT.

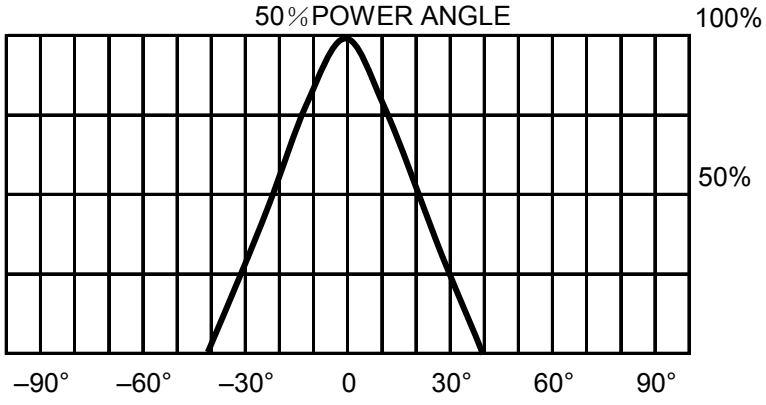



Fig.5 FAR FIELD PATTERN

# CAUTIONS:

## Storage time

1. The operation of Temperatures and RH are: 5℃~35℃, RH60%.

2. Once the package is opened, the products should be used within a week.

Otherwise, they should be kept in a damp proof box with descanting agent.

Considering the tape life, we suggest our customers to use our products within a year(from production date).

3. If opened more than one week in an atmosphere 5℃~ 35℃, RH60%, they should be treated at 60℃±5 ℃for 15hours.

## Cleaning

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED.

## ESD(Electrostatic Discharge)

Static Electricity or power surge will damage the LED. Use of a conductive wrist band or anti-electrosatic glove is recommended when handing these LED. All devices, equipment and machinery must be properly grounded.

## Soldering Instructions

Dip and wave soldering condition: <=260℃/3seconds,distance from solder joint to case is 3.0mm

**Reliability Test:**



**(1)Test Items And Results**

| Test Item | Standard Test Method | Test Conditions | Note | Number of Damaged |
|---|---|---|---|---|
| Resistance to Soldering Heat | JEITA ED-4701 300 302 | Tsld=260± 5℃,10sec. 3mm from the base of the epoxy bulb | 1time | 0/100 |
| Solderability | JEITA ED-4701 300 303 | Tsld=235+ 5℃,5sec. (using flux) | 1time over 95% | 0/100 |
| Thermal Shock | JEITA ED-4701 300 307 | -40℃/15min.~100℃/15min. | 100cycles | 0/100 |
| Temperature Cycle | JEITA ED-4701 100 105 | -40℃/30min.~25℃/5min. ~100℃/30min.~25℃/5min. | 100cycles | 0/100 |
| Moisture Resistance Cyclic | JEITA ED-4701 200 203 | 25℃~65℃~-10℃ 90%RH 24hrs./1cycle | 10cycles | 0/100 |
| Terminal Strength(bending test) | JEITA ED-4701 400 401 | Load 5N(0.5kgf) 0°~90°~0°bend 2 times | No noticeable damage | 0/100 |
| Terminal Strength(pull test) | JEITA ED-4701 400 401 | Load 10N(1kgf)10±1sec. | No noticeable damage | 0/100 |
| High temperature Storage | JEITA ED-4701 200 201 | Ta=100℃ | 1000hrs. | 0/100 |
| Temperature Humidity Storage | JEITA ED-4701 100 103 | Ta=60℃,RH=90% | 1000hrs. | 0/100 |
| Low Temperature Storage | JEITA ED-4701 200 202 | Ta=-40℃ | 1000hrs. | 0/100 |
| Steady state Operating Life | | Ta=25℃,IF=20mA | 1000hrs. | 0/100 |
| Steady State Operating Life of High Humidity Heat | | 60℃,RH=90%,IF=20mA | 500hrs. | 0/100 |
| Steady State Operating Life of Low Temperature | | Ta=-30℃,IF=20mA | 1000hrs. | 0/100 |
| Resistance to UV Beam | | 365nm/75W/mm | 192hrs. | 0/100 |

**(2)Criteria For Judging The Damage**

| Item | Symbol | Test Conditions | Criteria for Judgement | |
|---|---|---|---|---|
| | | | Min. | Max. |
| Forward Voltage | Vf | IF=20mA | - | U.S.L.*) x 1.1 |
| Reverse Current | Ir | VR=5V | - | U.S.L.*) x 2.0 |
| Luminous Intensity | Iv | IF=20mA | L.S.L.**) x 0.7 | - |

*)U.S.L:Upper Standard Level **)L.S.L:Lower Standard Level

**SICHUAN JIUZHOU APPLIED ELECTRONICS CO., LTD.**
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