

# 产品规格书

## The product specification

客 户 CUSTOMER \_\_\_\_\_

样品编号 SPEC NO \_\_\_\_\_ 1026 \_\_\_\_\_

产品型号 PART NO \_\_\_\_\_ 5RS4VCS \_\_\_\_\_

客户料号 PART NO \_\_\_\_\_

产品规格 MODEL \_\_\_\_\_ 5mm 圆头紫光透明 \_\_\_\_\_

日 期 DATE \_\_\_\_\_

客户确认结果及意见 CUSTOMER CONFIRMATION OUTCOME OPINION:

|  |       |
|--|-------|
| 客户确认: <input type="checkbox"/> 合格 <input type="checkbox"/> 不合格 | 年 月 日 |
| 客户意见: .....  |       |

承认签名 APPROVED SIGN-ATURES

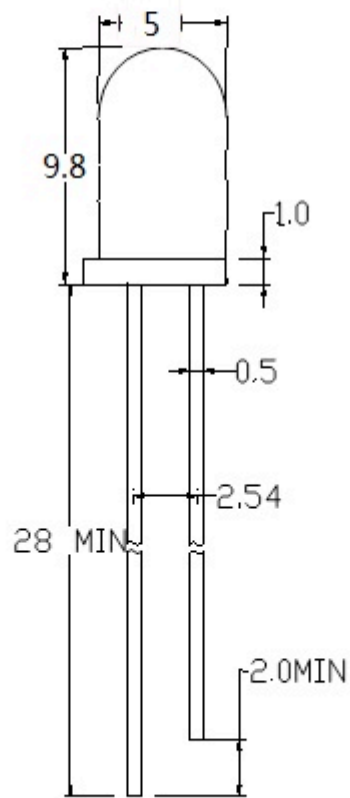
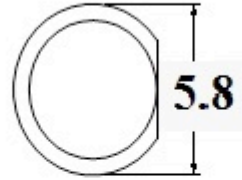
|                    |  |                   |  |               |  |
|--------------------|--|-------------------|--|---------------|--|
| 核 准<br>PREPARED BY |  | 核 对<br>CHECKED BY |  | 承 认<br>ACCEPT |  |
|--------------------|--|-------------------|--|---------------|--|

核 准:

核 对 :

填 表:

# 尺寸图:



| Item       | Materials                 |
|------------|---------------------------|
| Resin      | Epoxy                     |
| Lens Color | Colorless                 |
| Lead Frame | Ag plating ironwork Alloy |
| Dice       | AlGaInP                   |

## SPECIFICATION

### Absolute Maximum Rating (T<sub>a</sub> = 25°C)

| Items                        | Symbol           | Absolute maximum Rating | Unit |
|------------------------------|------------------|-------------------------|------|
| Forward Current              | I <sub>F</sub>   | 30                      | mA   |
| Peak Forward Current *       | I <sub>FP</sub>  | 100                     | mA   |
| Reverse Voltage              | V <sub>R</sub>   | 5                       | V    |
| Power Dissipation            | P <sub>D</sub>   | 120                     | mW   |
| Electyostatic discharge      | ESD              | 2000                    | V    |
| Operation Temperature        | T <sub>opr</sub> | -30 ~ +85               | °C   |
| Storage Temperature          | T <sub>stg</sub> | -40 ~ +100              | °C   |
| Lead Soldering Temperature * | T <sub>sol</sub> | Max 260°C for 5 sec Max |      |

\* I<sub>FP</sub> Conditions: Pulse Width ≤ 10msec

\* T<sub>sol</sub> Conditions: 3mm from the base of the epoxy bulb

### Initial Electrical/Optical Characteristics (T<sub>a</sub>=25°C)

| 项目   | 符号             | 条件值                   | Min. | Typ.  | Max. | Unit |
|------|----------------|-----------------------|------|-------|------|------|
| 顺向电压 | V <sub>F</sub> | I <sub>F</sub> = 20mA | 3.0  | ---   | 4.0  | V    |
| 反向电流 | I <sub>R</sub> | V <sub>R</sub> = 5V   | ---  | ---   | 10   | μ A  |
| 波长   | Wd             | IF=20mA               | ---  | 400   | ---- | nm   |
| 亮度   | Iv             | IF=20mA               | 200  | ----- | 300  | mcd  |
| 视角   | 2 θ ½          | I <sub>F</sub> =20mA  | ---  | 30    | ---  | deg  |

#### Notes:

\*One normal delivery will include all ranks listed above.

The quantity ratio of the ranks is decided by LaiSuo

Measurement Uncertainty of the Luminous intensity : ±15%

# Measurement Uncertainty of the Dominant Wavelength : ±1.0nm

## RELIABILITY

### Test Items And Results

| Type                   | Test Item                    | REF. Standard         | Test Condition  | Note                 | Number of Damaged |
|------------------------|------------------------------|-----------------------|---|----------------------|-------------------|
| Environmental Sequence | Temperature Cycle            | JIS C 7021 (1977)A-4  | -40°C ⇒ 25°C ⇒ 100°C ⇒ 25°C<br>30mins, 5mins, 30mins, 5mins                 | 100 cycles           | 0 / 100           |
|                        | Thermal Shock                | MIL-STD-107D          | -40°C ⇒ 100°C<br>15mins, 15mins   | 100 cycles           | 0 / 100           |
|                        | High Humidity Heat Cycle     | JIS C 7021 (1977)A-5  | 30°C ⇒ 65°C<br>90%RH 24hrs/1cycle   | 10 cycles            | 0 / 100           |
|                        | High Temperature Storage     | JIS C 7021 (1977)B-10 | T <sub>a</sub> = 100°C  | 1000hrs              | 0 / 100           |
|                        | Humidity Heat Storage        | JIS C 7021 (1977)B-11 | T <sub>a</sub> = 60°C<br>RH = 90%   | 1000hrs              | 0 / 100           |
|                        | Low Temperature Storage      | JIS C 7021 (1977)B-12 | T <sub>a</sub> = -40°C  | 1000hrs              | 0 / 100           |
| Operation Sequence     | Life Test                    | JIS C 7035 (1985)     | T <sub>a</sub> = 25°C<br>I <sub>F</sub> = 30mA                              | 1000hrs              | 0 / 100           |
|                        | High Humidity Heat Life Test | *                     | 60°C RH=90%<br>I <sub>F</sub> = 20mA  | 500hrs               | 0 / 100           |
|                        | Low Temperature Life Test    | *                     | T <sub>a</sub> = -40°C<br>I <sub>F</sub> = 20mA                             | 1000hrs              | 0 / 100           |
| Destructive Sequence   | Resistance to Soldering Heat | JIS C 7021 (1977)A-11 | T <sub>sol</sub> = 260±5°C , 10sec<br>(3mm from the base of the epoxy bulb) | 1 time               | 0 / 20            |
|                        | Solderability                | JIS C 7021 (1977)A-2  | T <sub>sol</sub> = 235±5°C , 5sec<br>(using flux)                           | 1 time<br>(over 95%) | 0 / 20            |
|                        | Lead Pull/Bend Test          | JIS C 7021 (1977)A-11 | Load 2.5N (0.25kgf)<br>0° ⇒ 90° ⇒ 0° bend 3 times                           | No noticeable damage | 0 / 20            |

\*Refer to reliability test standard specification for in this line.

