



规格书

SPECIFICATION

文件编号: XY-QS-1-A-088
NO. _____
客户名称: _____
Customer: _____
客户料号: _____
Part.No.: _____
品名: 3W High Power LED
Description (Pure White) _____
规格: _____
Model: XY-3WWJA-1 _____
送样日期: _____
Day: _____

| | | |
|------------------------------|----------------|--------------|
| 客户承认章/签 CUSTOMER APPROVED | 核准 APPROVED | 制定 ISSUED |
| | 林金填 | 卢淑芬 |

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<http://www.xy-led.com>

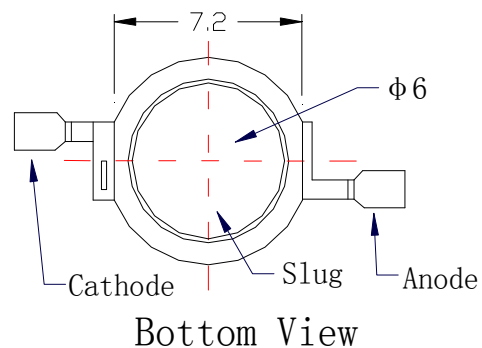
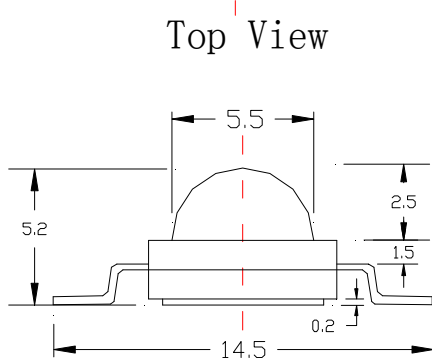
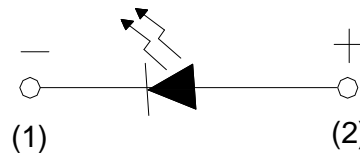
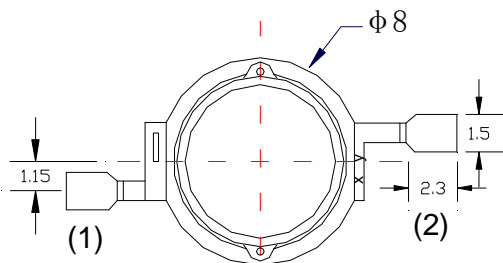
◆ Features

- * Small package with high efficiency
- * Designed for high current operation
- * Low voltage operation, Instant light,
Long operation life
- * Lead free product
- * RoHS compliant

◆ Applications:

- * Mobile phone flash
- * Automotive interior/Exterior lighting
- * Automotive forward lighting
- * Architectural lighting
- * LCD TV / Monitor backlight
- * Projector light source
- * Traffic signals
- * Task lighting
- * Decorative/ Pathway lighting
- * Remote / Solar powered lighting
- * Household appliances

◆ Package Dimensions



Notes:

1. All dimensions are in mm,
2. Tolerance is ± 0.3 mm unless otherwise noted.



◆ **Absolute Maximum Ratings (T_A=25℃)**

| Parameter | Symbol | Rating | Unit |
|-------------------------------------|--------------------|------------|------|
| Power Dissipation (功耗) | P _D | 3 | W |
| Forward Current (正向电流) | I _F | 700 | mA |
| Peak Forward Current* (脉冲峰值电流) | I _{FP} | 3000 | mA |
| Junction temperature (有限最高结温) | T _j | 120 | ℃ |
| Operation Temperature Range (工作温度) | T _{opr} | -25 to +75 | ℃ |
| Storage Temperature Range (贮藏温度) | T _{stg} | -40 to +80 | ℃ |
| Thermal resistance (有效热阻) | R _{J-B} | 8 | ℃/W |
| ESD Sensitivity (HBM) (抗静电级别) | -- | 2000 | V |
| Hand Soldering Temperature (手工焊接温度) | 350 ± 20℃/3 ~ 5sec | | |

NOTE: * Pulse width ≤ 0.1msec Duty Ratio ≤ 1/10

◆ **Electrical-Optical Characteristics (T_A=25℃)**

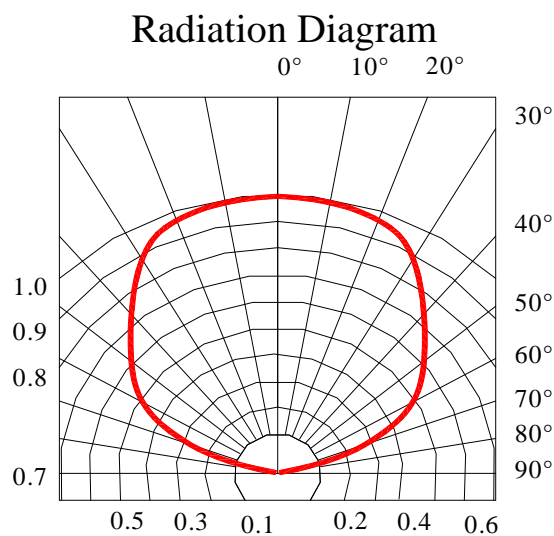
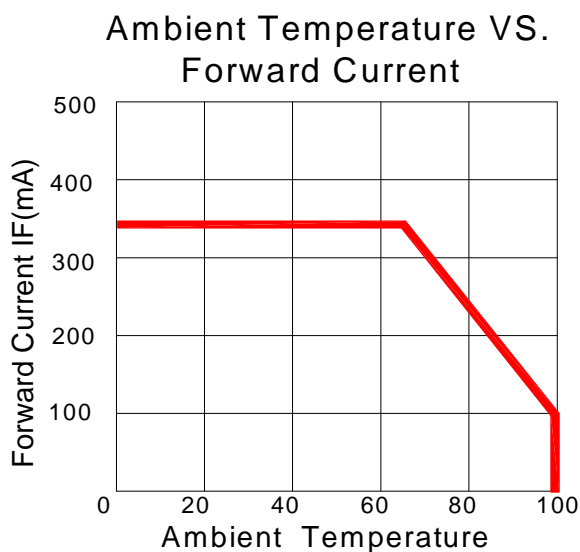
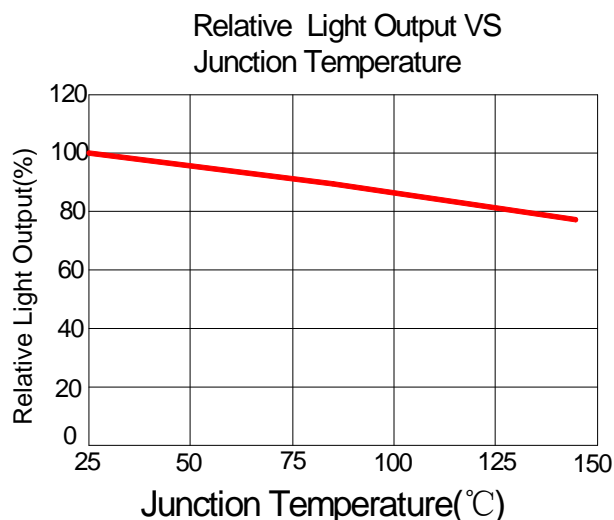
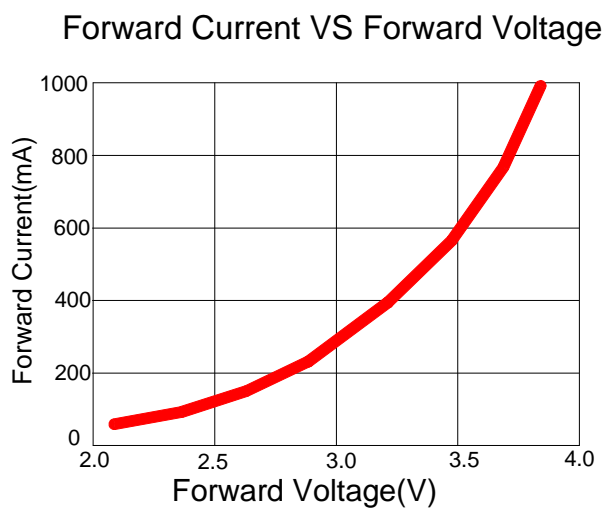
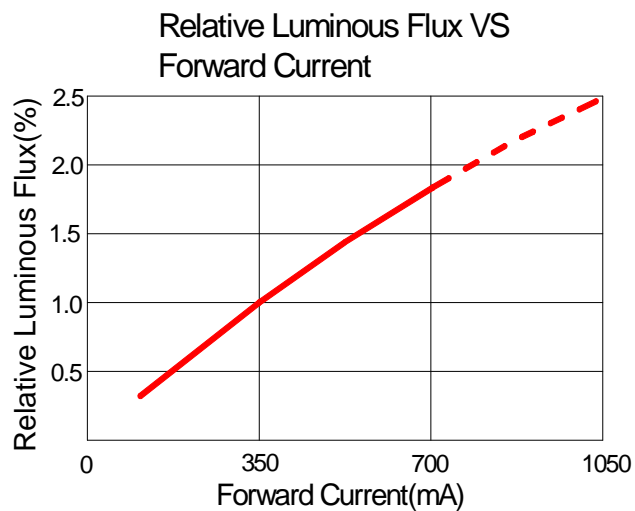
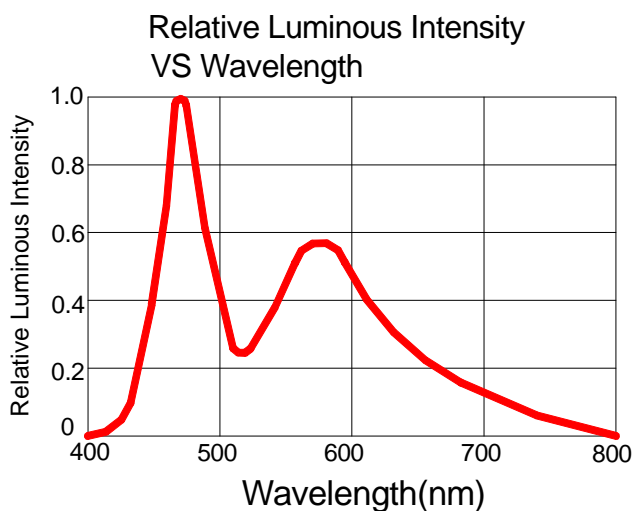
| Parameter | Test Condition | Symbol | Min | Typ | Max | Unit |
|-------------------|-----------------------|----------------------|------|-----|------|------|
| Forward Voltage | I _F =700mA | V_F | 3.5 | | 3.8 | V |
| Reverse Current | V _R =-5V | I_R | | | 10 | μA |
| View Angle | -- | 2Θ 1/2 | | 140 | | deg. |
| Luminous flux | I _F =700mA | Φ_v | 180 | | 210 | lm |
| Color Temperature | I _F =700mA | CCT | 5700 | | 6300 | K |

Note:

1. Tolerance of measurement of luminous flux ±10%
2. Tolerance of measurement of CCT ±5%
3. Tolerance of measurement of chromatic coordinates ±0.005
4. Tolerance of measurement of forward voltage ±0.05V

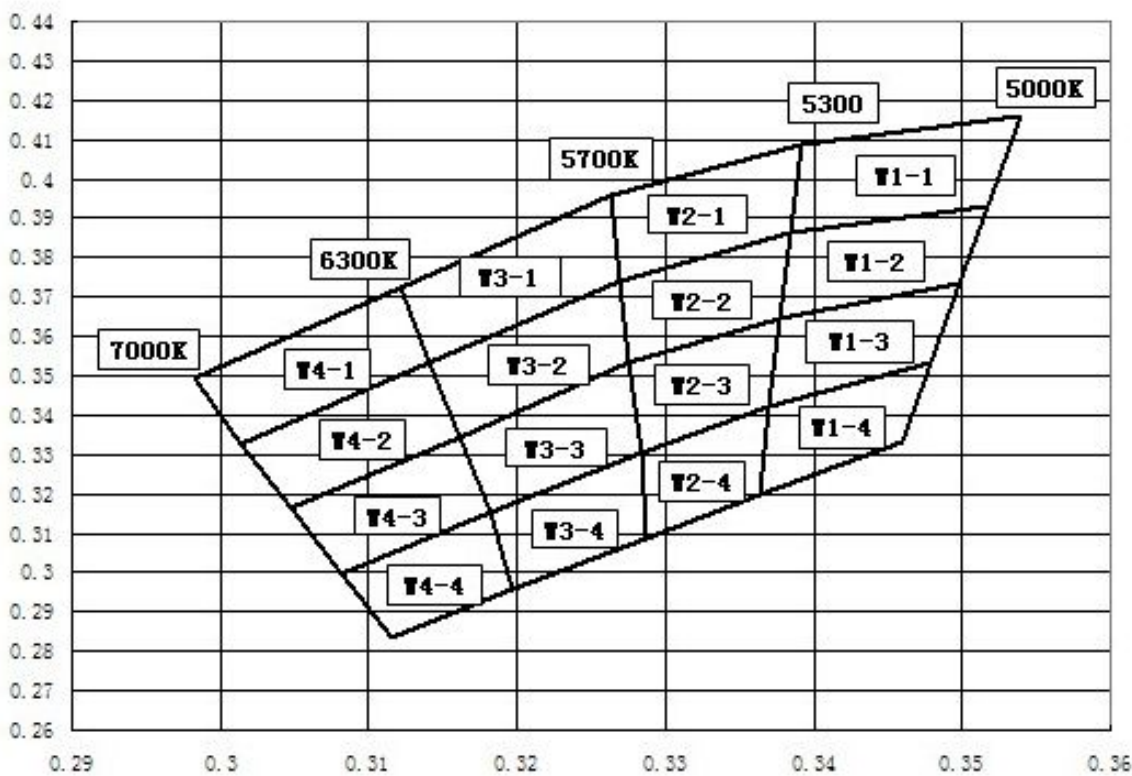


◆ Typical Electrical/Optical Characteristic Curves ($I_f=700\text{mA}; T_A=25^\circ\text{C}$)





◆CIE Chromaticity Diagram:(If=700mA;TA=25°C)



Color RANK:(If=700mA;TA=25°C)

| Rank | Chromaticity Coordinate Rank | | | | | Rank | Chromaticity Coordinate Rank | | | | |
|------|------------------------------|--------|--------|--------|--------|------|------------------------------|--------|--------|--------|--------|
| W1 | X | 0.3392 | 0.3363 | 0.346 | 0.3539 | W4 | X | 0.3079 | 0.3177 | 0.3226 | 0.3162 |
| | Y | 0.4088 | 0.32 | 0.3333 | 0.4133 | | Y | 0.3649 | 0.2924 | 0.3002 | 0.3794 |
| W2 | X | 0.3264 | 0.3287 | 0.3363 | 0.3392 | | | | | | |
| | Y | 0.3959 | 0.3085 | 0.32 | 0.4088 | | | | | | |
| W3 | X | 0.3162 | 0.3226 | 0.3287 | 0.3264 | | | | | | |
| | Y | 0.3794 | 0.3002 | 0.3085 | 0.3959 | | | | | | |



◆ Reliability

1. Test Items And Results

| Item | Standard Test Method | Test conditions | Note | Number of Damaged |
|---|--------------------------|---|-------------|-------------------|
| Resistance to Soldering Heat | JEITA ED-4701 300 302 | $T_{SLD}:160^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 10sec | 1 time | 0/30 |
| Solder ability | JEITA ED-4701 300 303 | $TSLD=150 \pm 5^{\circ}\text{C}$,5Sec | 1time | 0/30 |
| Thermal Shock | JEITA ED-4701 300 307 | $-40-100^{\circ}\text{C}$ 15min, 15min | 300cycles | 0/30 |
| Temperature Cycle | JEITA ED-4701 100 105 | $-40^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim 100^{\circ}\text{C} \sim 25^{\circ}\text{C}$ 30min. 5min. 30min.5min | 160cycles | 0/30 |
| Terminal Strength (Pull test) | JEITA ED-4701 400 401 | Load 10N(1kgf) $10 \pm 1\text{sec}$ | None Damage | 0/30 |
| Terminal Strength (bending test) | JEITA ED-4701 400 401 | Load 5N(0.5kgf) $0^{\circ} \sim 90^{\circ} \sim 0^{\circ}$ bend 2 times | None Damage | 0/30 |
| Temperature Humidity Storage | JEITA ED-4701 100 103 | $T_a=60^{\circ}\text{C}$,RH=90% | 1000hrs | 0/30 |
| Steady State Operating life | -- | $T_a=25^{\circ}\text{C}$,IF=700mA | 1000hrs | 0/30 |
| Steady State Operating life of High Humidity Heat | -- | $T_a=60^{\circ}\text{C}$ RH=90%,IF=700mA | 1000hrs | 0/30 |
| High Temperature Storage | JEITA ED-4701 200 201 | $T_a=100^{\circ}\text{C}$ | 1000HRS | 0/30 |
| Low Temperature Storage | JEITA ED-4701 200 202 | $T_a=-40^{\circ}\text{C}$ | 1000HRS | 0/30 |

2. Criteria for Judging The Damage

| Item | Symbol | Test Conditions | Criteria for Judgment | |
|--------------------|--------|------------------------|---------------------------|---------------------------|
| | | | Min. | Max. |
| Forward Voltage | V_F | $I_F = 700 \text{ mA}$ | --- | Initial Data $\times 1.1$ |
| Luminous Intensity | I_V | $I_F = 700 \text{ mA}$ | Initial Data $\times 0.9$ | --- |
| Reverse Current | I_R | $V_R = 5\text{V}$ | --- | $\leq 10\mu\text{A}$ |