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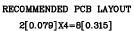
PRELIMINARY SPEC

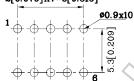
Features

- Low power consumption
- Robust package
- I.C. Compatible
- \bullet Configuration: Gray face w/ yellow fluorescent segments
- \bullet Optional black face provides superior color contrast
- RoHS Compliant





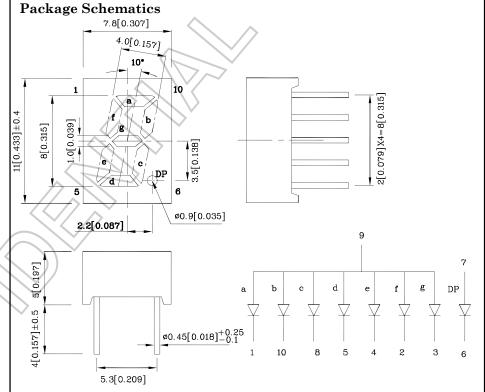






Mar 25, 2016

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Notes:

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25 (0.01")$ unless otherwise noted. 2. Specifications are subject to change without notice.

| Absolute Maximum Ratings $(T_A=25$ °C) | | White (InGaN) | Unit | |
|--|-----------------------|------------------|------|--|
| Reverse Voltage | $V_{\rm R}$ | 5 | V | |
| Forward Current | I_{F} | 30 | mA | |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | ifs | 100 | mA | |
| Power Dissipation | P_{D} | 120 | mW | |
| Operating Temperature | T_{A} | -40 ~ +85 | °C | |
| Storage Temperature | Tstg | -40 ~ +85 | | |
| Electrostatic Discharge Threshold (HBM) | | 1000 | V | |
| Lead Solder Temperature | 260°C For 3-5 Seconds | | | |

| [2mm Below Package Base] | 200 C For 3-5 Seconds |
|--|--------------------------------|
| A Relative Humidity between 40% and ESD-protected work areas to reduce st process (Reference JEDEC/JESD625-4 | tatic build up during assembly |

| Operating Characteristics (T _A =25°C) | | White (InGaN) | Unit |
|--|------------------|------------------|------|
| Forward Voltage (Typ.) $(I_F=10 \text{mA})$ | V_{F} | 3.05 | V |
| Forward Voltage (Max.) (I _F =10mA) | V_{F} | 4 | V |
| Reverse Current (Max.) (V _R =5V) | I_R | 10 | uA |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | C | 100 | pF |

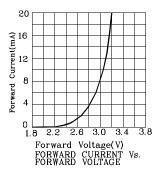
| Part Number | Emitting Color | Emitting Material | Luminous Intensity CIE127-2007* (I _F =5mA) ucd | CIE12 | Intensity 7-2007* 0mA) cd | Description |
|----------------|-------------------|----------------------|--|--------|------------------------------------|------------------------------------|
| | | | min. typ. | min. | typ. | |
| XD06A-1-PJ23P | White | InGaN | 9000* 22990* | 14000* | 37990* | Common Anode, Rt. Hand Decimal. |

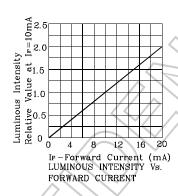
^{*}Luminous intensity value is in accordance with CIE127-2007 standards.

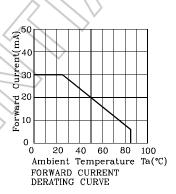


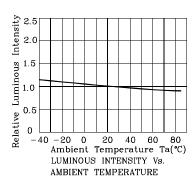
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White

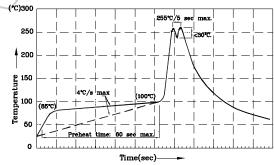








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



Notes:

- Notes:

 1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C

 2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec
- max).
- 3.Do not apply stress to the epoxy resin while the temperature is above 85°C.
 4.Fixtures should not incur stress on the component when mounting and during soldering process.
 5.SAC 305 solder alloy is recommended.
 6.No more than one wave soldering pass.
- 7.During wave soldering, the PCB top-surface temperature should be kept below 105°C.

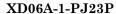
Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or chromaticity), the typical accuracy of the sorting process is as follows:

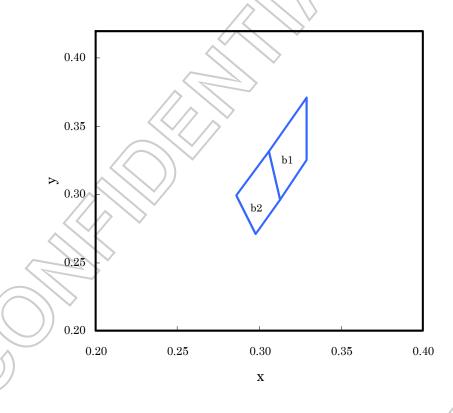
- 1. Measurement tolerance of the chromaticity coordinates is ± 0.01 .
- 2. Luminous Intensity/ Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.







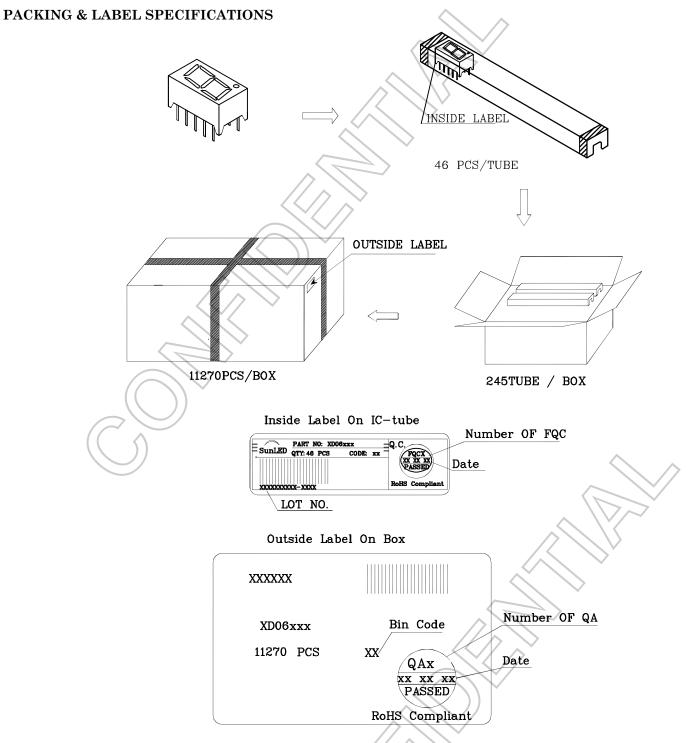


| | X | у | | x | у |
|----|-------|-------|----|-------|-------|
| | 0.298 | 0.271 | b1 | 0.313 | 0.296 |
| b2 | 0.313 | 0.296 | | 0.329 | 0.325 |
| 52 | 0.306 | 0.332 | | 0.329 | 0.371 |
| | 0.286 | 0.299 | | 0.306 | 0.332 |

Notes:

Shipment may contain more than one chromaticity regions. Orders for single chromaticity region are generally not accepted. Measurement tolerance of the chromaticity coordinates is ± 0.01 .





TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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- 6. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp

Mar 25, 2016