



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Features

- 0.8 inch digit height.
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. boards or sockets.
- Categorized for luminous intensity.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

### Description

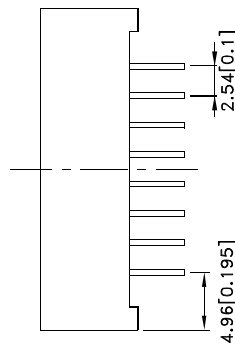
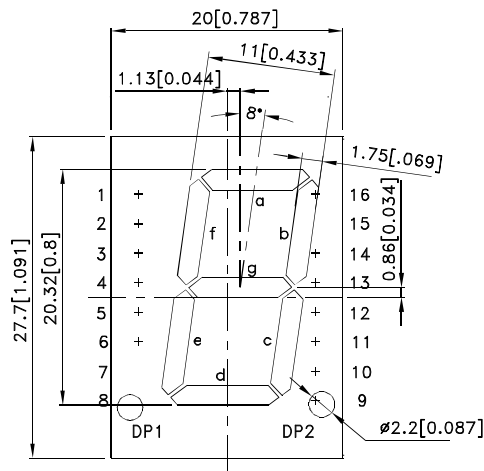
The Blue source color devices are made with InGaN Light Emitting Diode.

Static electricity and surge damage the LEDs.

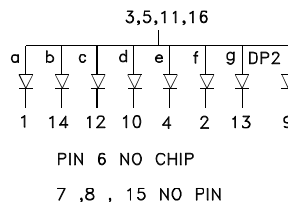
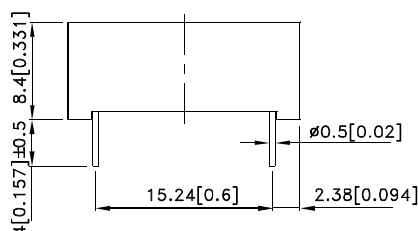
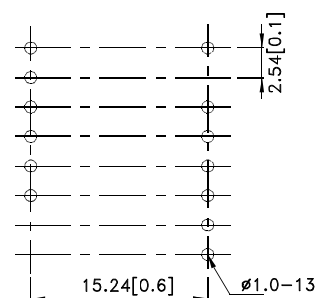
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### Package Dimensions & Internal Circuit Diagram



#### RECOMMENDED PCB LAYOUT



#### Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
SA08-11QBWA/D	Blue (InGaN)	White Diffused	5600	15000	Common Anode, Rt. Hand Decimal.

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Blue	468		nm	I <sub>F</sub> =20mA
$\lambda_D$ [1]	Dominant Wavelength	Blue	470		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	I <sub>F</sub> =20mA
C	Capacitance	Blue	100		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Blue	3.3	4.0	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Blue		50	uA	V <sub>R</sub> =5V

Notes:

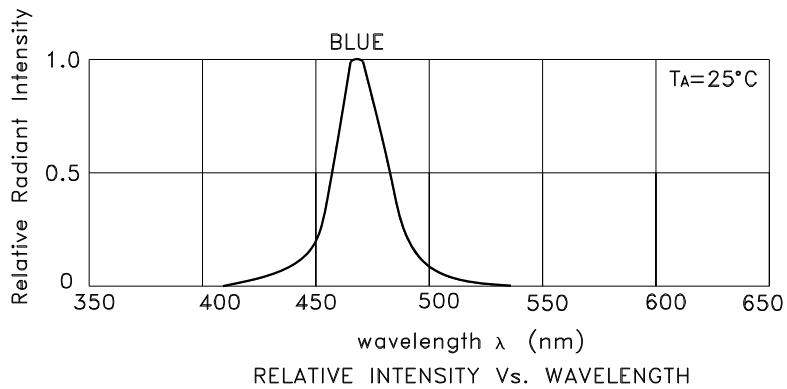
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

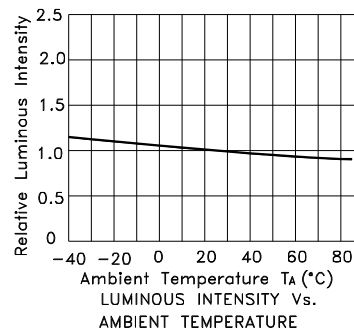
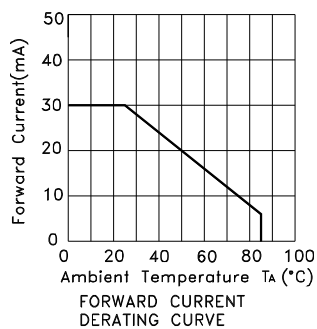
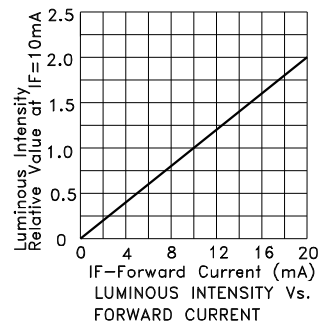
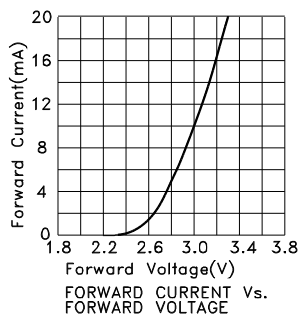
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.



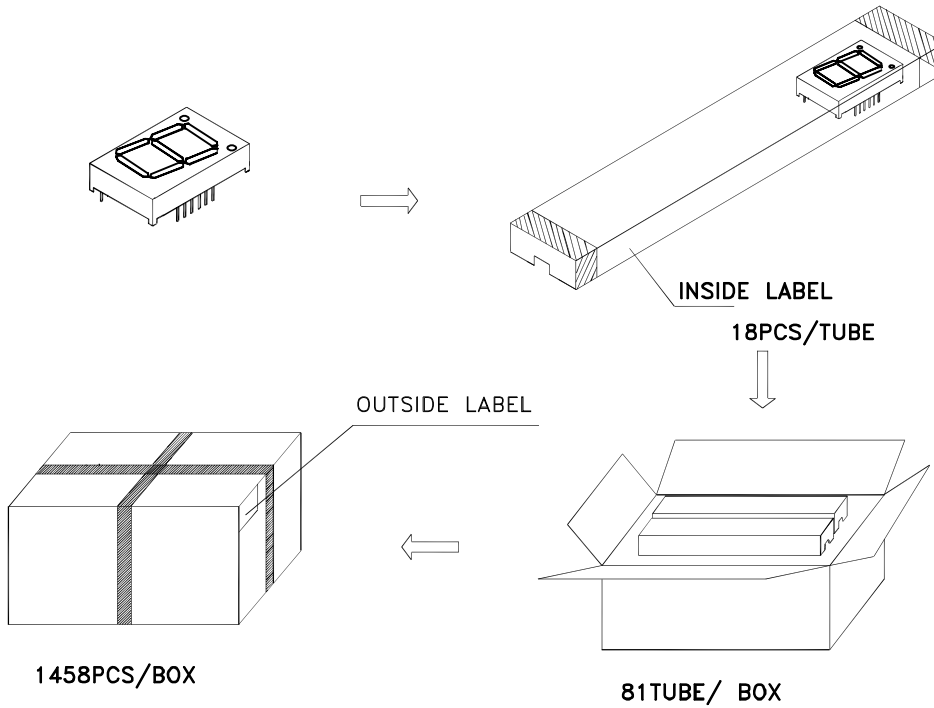
**Blue**

**SA08-11QBWA/D**

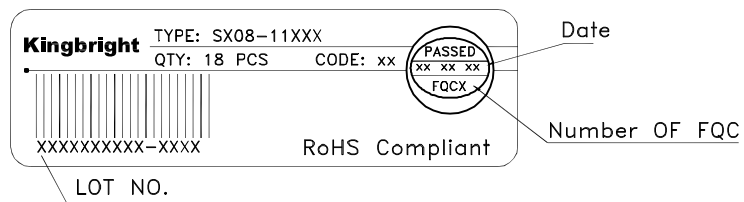


## PACKING & LABEL SPECIFICATIONS

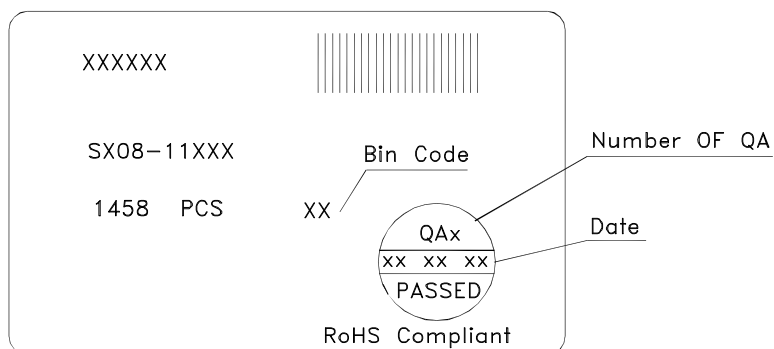
## SA08-11QBWA/D



Inside Label On IC-tube



Outside Label On Box



## THROUGH HOLE DISPLAY MOUNTING METHOD

### Lead Forming

Do not bend the component leads by hand without proper tools.  
The leads should be bent by clinching the upper part of the lead firmly such that the bending force is not exerted on the plastic body.



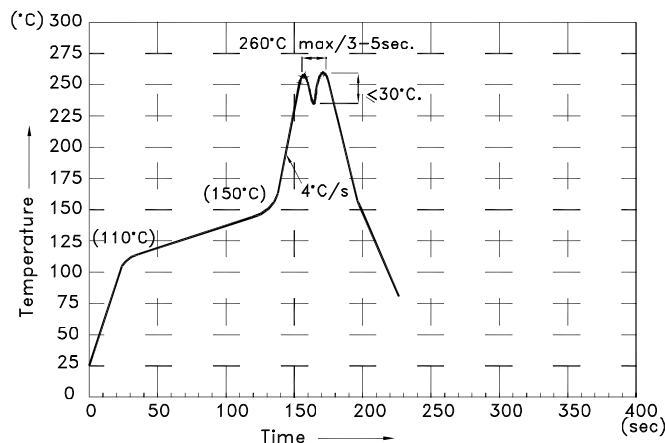
### Installation

1. The installation process should not apply stress to the lead terminals.
2. When inserting for assembly, ensure the terminal pitch matches the substrate board's hole pitch to prevent spreading or pinching the lead terminals.



## DISPLAY SOLDERING CONDITIONS

Wave Soldering Profile For Lead-free Through-hole LED.



### NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C
5. No more than once.

## Soldering General Notes:

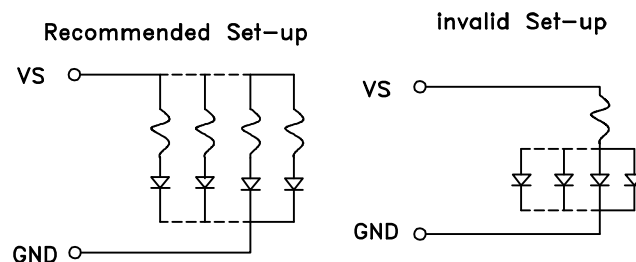
- a. Through-hole displays are incompatible with reflow soldering.
- b. If components will undergo multiple soldering processes, or other processes where the components may be subjected to intense heat, please check with Kingbright for compatibility.

## CLEANING

1. Mild "no-clean" fluxes are recommended for use in soldering.
2. If cleaning is required, Kingbright recommends to wash components with water only. Do not use harsh organic solvents for cleaning, because they may damage the plastic parts. And the devices should not be washed for more than one minute.

## CIRCUIT DESIGN NOTES

1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [LED Displays & Accessories](#) category:*

*Click to view products by [Kingbright](#) manufacturer:*

Other Similar products are found below :

[LTC-4624JD](#) [LTC-4627WC](#) [LTC-571P](#) [LTM-8522G](#) [LTP-4323P](#) [LTP-747G](#) [LTS-3361JG-06](#) [1668](#) [HT-F196NB-5323](#) [IPD2131-27](#) [SA03-12EWA](#) [LDQ-N514RI](#) [LDS-A3506RD](#) [LDS-A3926RI](#) [SC03-12HDB](#) [SI-B9T151550WW](#) [SI-B9V171550WW](#) [SLC-3PF-WL](#) [SLDN-32M-G1624](#) [LTC-2621JD](#) [LTC-2623WC](#) [LTC-4627JD](#) [LTD-322G](#) [LTD-482PC](#) [LTP-1057AHR](#) [LTP-1457AKR](#) [LTP-3784G-01](#) [LTS-313AP](#) [LTS-4812SKR-P](#) [LTS-547AE](#) [LTS-6780P](#) [446010401-3](#) [HV-7W30-6829](#) [DA43-11GWA](#) [LDD-A516RI-17](#) [LDD-E305RI](#) [LDQ-N3402RI](#) [LDQ-N3606RI](#) [LDT-M2804RI](#) [86004CB830](#) [LTP-3862JD](#) [LTP-2088AKD](#) [LTD-6740P](#) [LTS-6880Y](#) [LDS-SMC3002RISUGTR](#) [LTC-2623E](#)  
[CC25-12YWA](#) [LDM-6432-P3-UR-1](#) [SR420312N/32](#)