Kingbright

25.4mm (1.0 INCH) SINGLE DIGIT NUMERIC DISPLAY

PRELIMINARY SPEC

Part Number: SA10-11PBWA BLUE

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- 1.0 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- HIGH LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- STANARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

Description

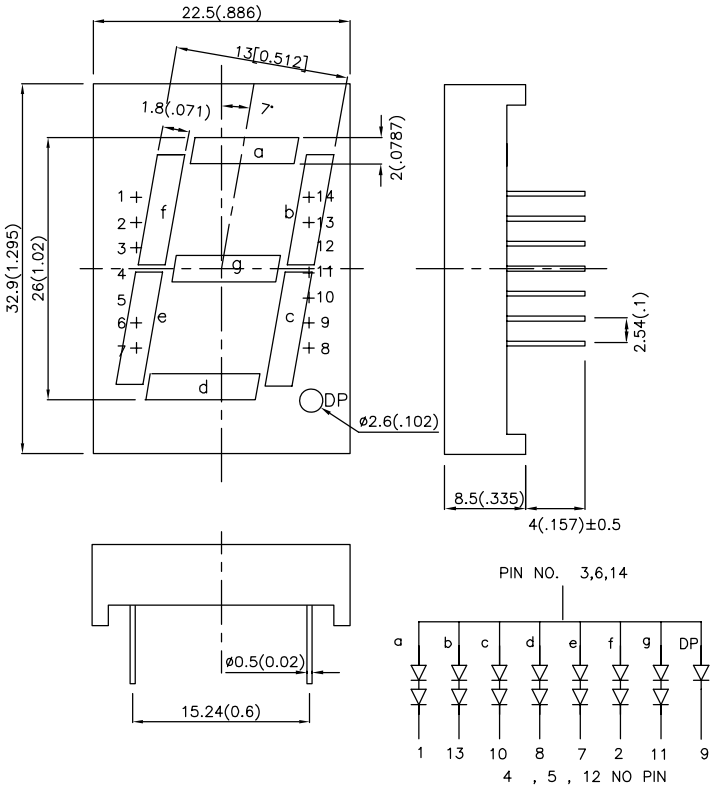
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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



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

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
SA10-11PBWA	BLUE (InGaN)	WHITE DIFFUSED	8000	30000	Common Anode, Rt. Hand Decimal

Note:
1. Luminous Intensity / Luminous Flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

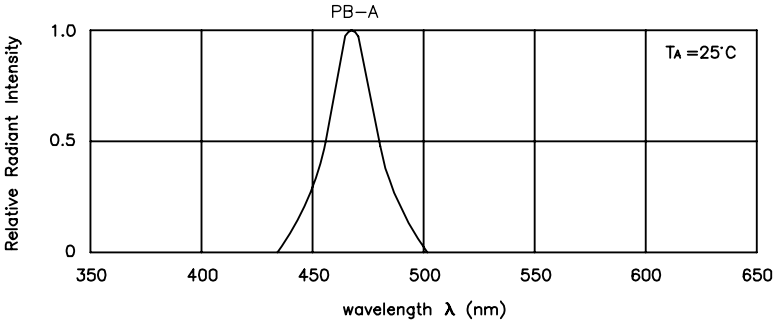
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	468		nm	I_F=20mA
λD [1]	Dominant Wavelength	Blue	470		nm	I_F=20mA
$\Delta\lambda$1/2	Spectral Line Half-width	Blue	21		nm	I_F=20mA
C	Capacitance	Blue	100		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage Per Segment or(DP)	Blue	6.6 (3.3)	7.6 (3.8)	V	I_F=20mA
I_R	Reverse Current Per Segment or(DP)	Blue		10	uA	V_R = 10V (V_R = 5V)

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

Absolute Maximum Ratings at T_A=25°C

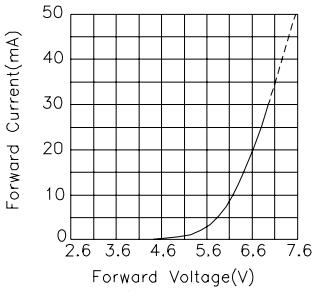
Parameter	Blue	Units
Power dissipation Per Segment or(DP)	228(114)	mW
DC Forward Current Per Segment or(DP)	30(30)	mA
Peak Forward Current [1] Per Segment or(DP)	100(100)	mA
Reverse Voltage Per Segment or(DP)	10(5)	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3~5 Seconds	

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

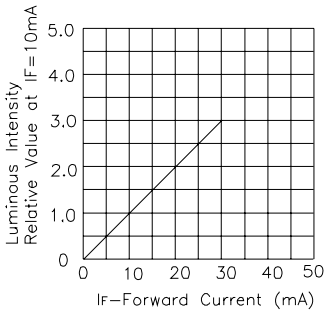


RELATIVE INTENSITY Vs. WAVELENGTH

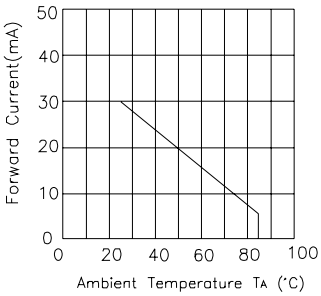
Blue **SA10-11PBWA**



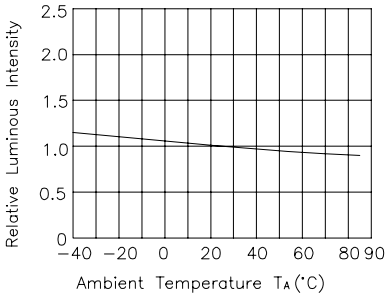
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

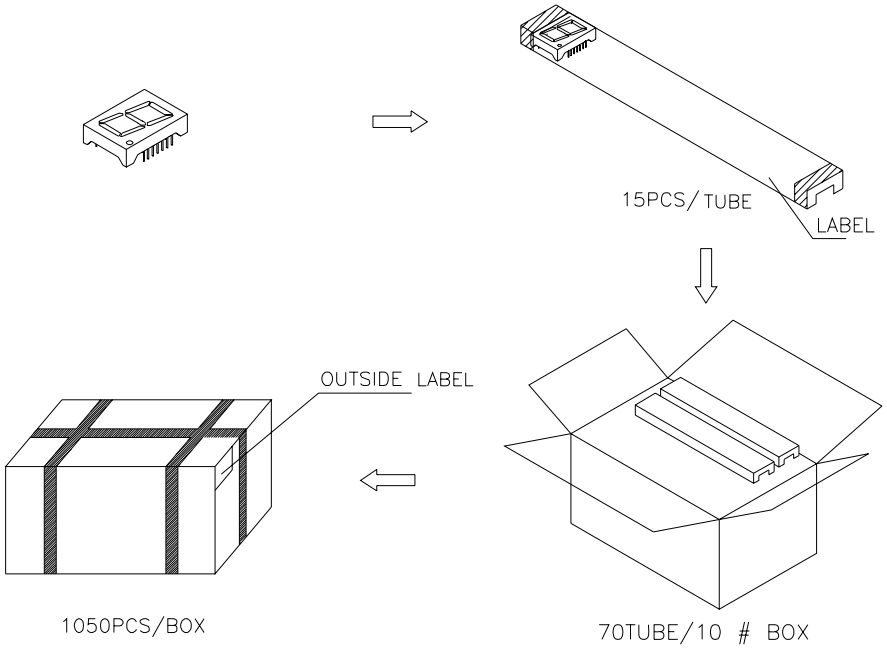


FORWARD CURRENT
DERATING CURVE

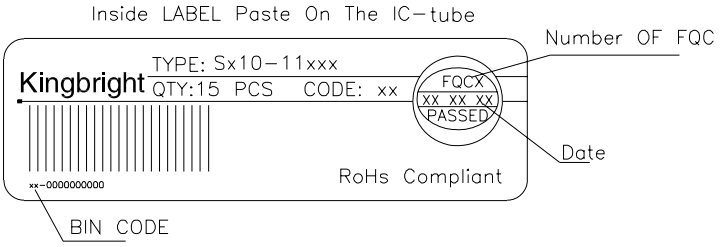
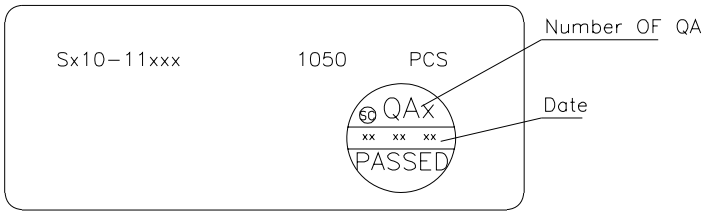


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

PACKING & LABEL SPECIFICATIONS **SA10-11PBWA**



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box