

PRELIMINARY SPEC



ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: SA23-12QBWA-D

Blue

Features

- 2.3 inch digit height.
- Low current operation.
- Excellent character appearance.
- High light output.
- Easy mounting on P.C. boards or sockets.
- Multicolor available.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

Description

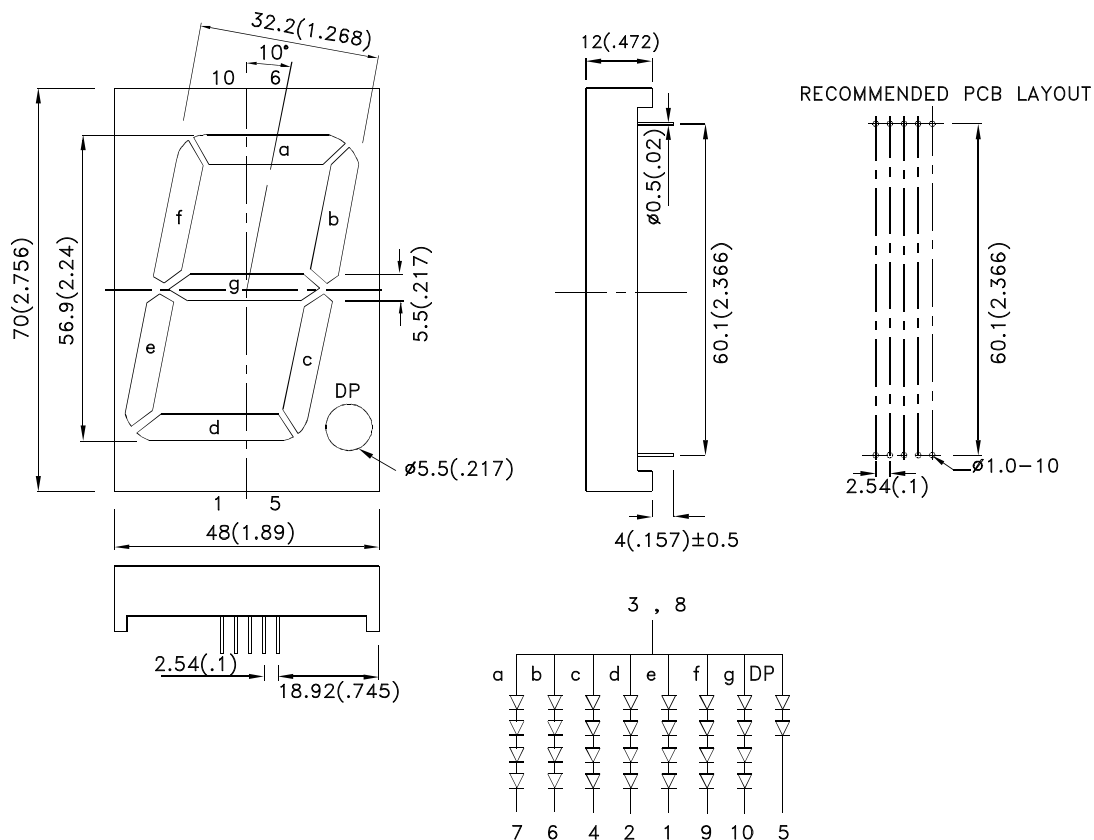
The Blue source color devices are made with InGaN Light Emitting Diode.

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



Notes:

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.



Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
SA23-12QBWA-D	Blue (InGaN)	WHITE DIFFUSED	18000	71100	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
λ_{peak}	Peak Wavelength	Blue	468		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Blue	470		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	I _F =20mA
C	Capacitance	Blue	100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage Per Segment Or (DP)	Blue	13.2 (6.6)	16.0 (8.0)	V	I _F =20mA
I _R	Forward Voltage Per Segment Or (DP)	Blue		10 (10)	uA	V _R =20V (V _R =10V)

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

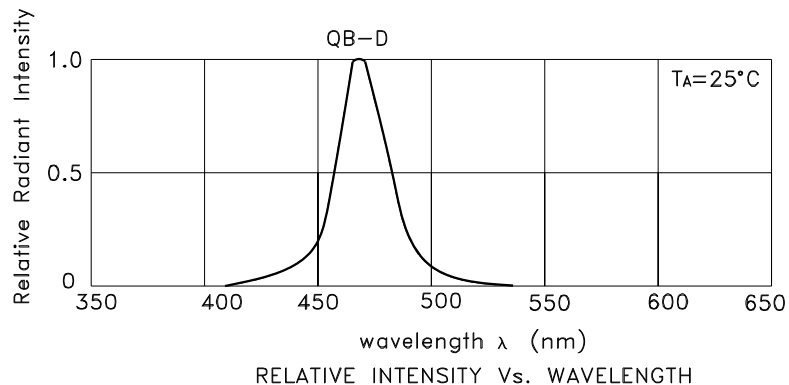
Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation Per Segment Or (DP)	480 (240)	mW
DC Forward Current Per Segment Or (DP)	30 (30)	mA
Peak Forward Current [1] Per Segment Or (DP)	150 (150)	mA
Reverse Voltage Per Segment Or (DP)	20 (10)	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

Notes:

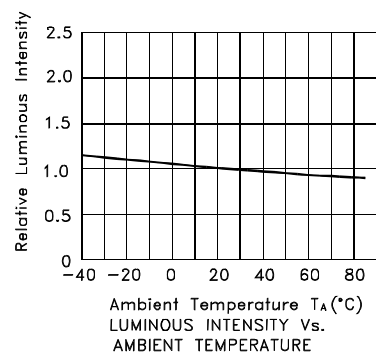
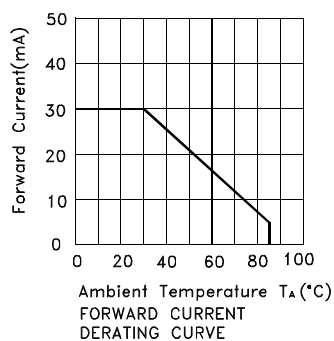
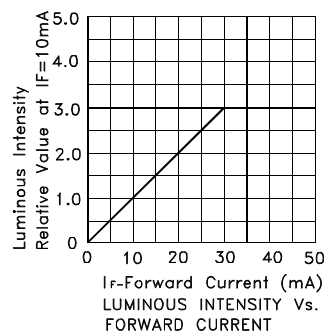
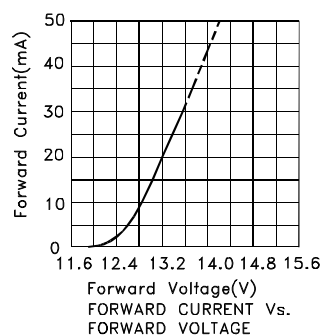
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

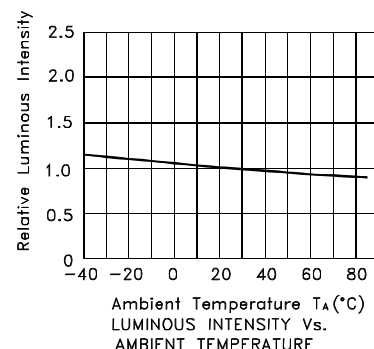
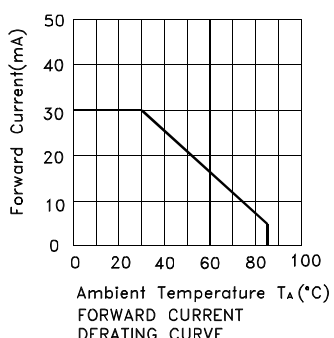
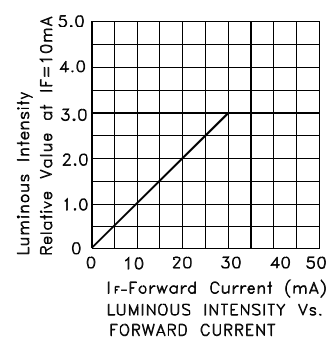
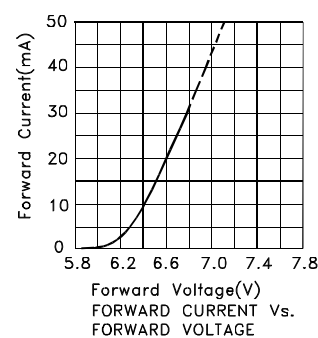
2. 2mm below package base.



Blue

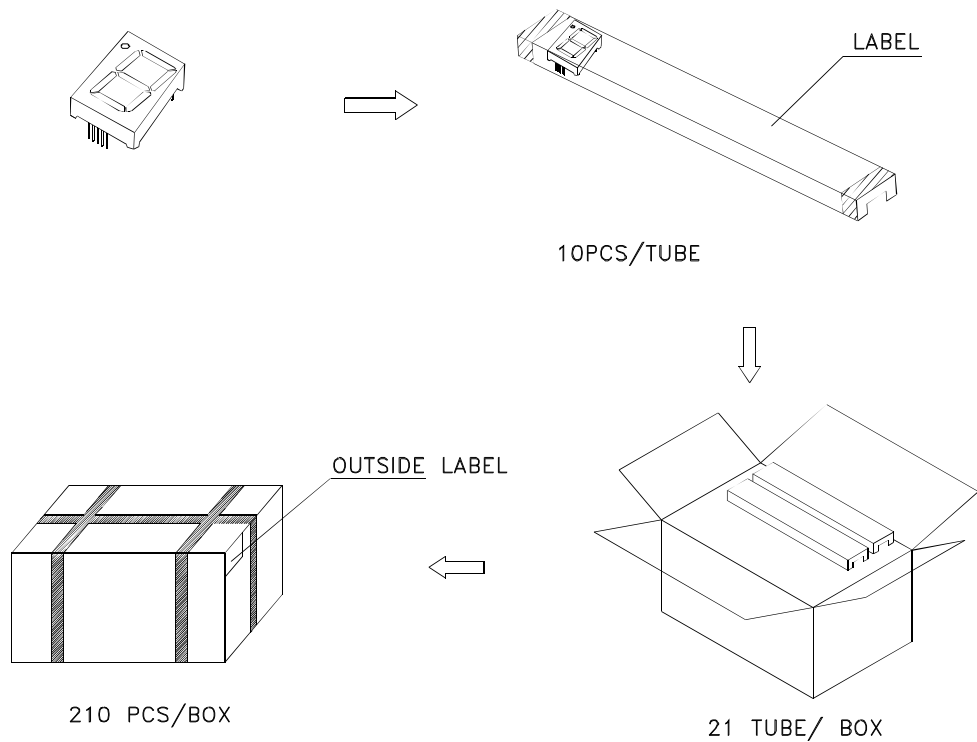
SA23-12QBWA-D





PACKING & LABEL SPECIFICATIONS

SA23-12QBWA-D



Inside LABEL Paste On The IC-tube

Kingbright	TYPE: SX23-12XXX	PASSED xx xx xx FQCX	Date
	QTY: 10 PCS CODE: xx		
XXXXXXXXXX-XXXX		Number OF FQC	
RoHS Compliant			
LOT NO.			

Outside LABEL Paste On The Box

XXXXXX	Bin Code		Number OF QA
SX23-12XXX	XX		
210 PCS	QAx xx xx xx PASSED		Date
RoHS Compliant			