Kingbright

56.9mm (2.3 INCH) SINGLE DIGIT NUMERIC DISPLAY

SA23-12SGWB SUPER BRIGHT GREEN

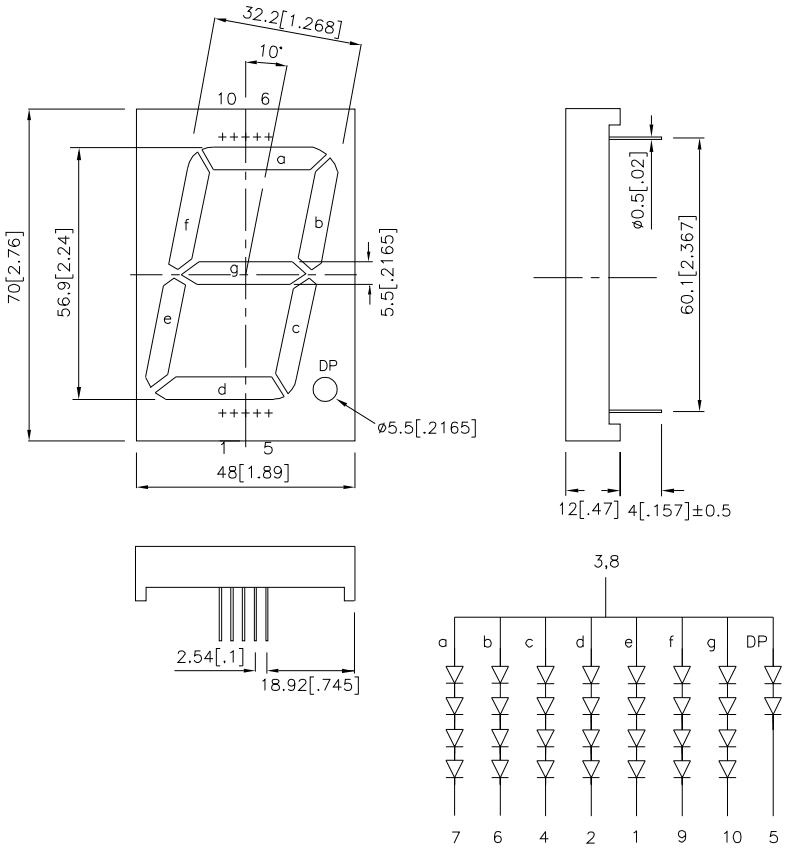
Features

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

Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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.

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Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @ 10mA		Description
			Min.	Typ.	
SA23-12SGWB	SUPER BRIGHT GREEN (GaP)	WHITE DIFFUSED	4700	23000	Common Anode, Rt. Hand Decimal.

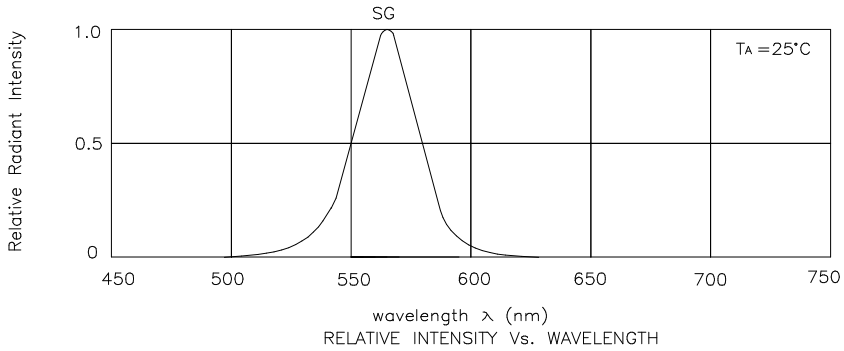
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	I_F=20mA
λD	Dominant Wavelength	Super Bright Green	568		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	I_F=20mA
C	Capacitance	Super Bright Green	15		pF	V_F=0V;f=1MHz
V_F	Forward Voltage Per Segment (DP)	Super Bright Green	8.8 (4.4)	10.0 (5.0)	V	I_F=20mA
I_R	Reverse Current Per Segment (DP)	Super Bright Green		10 (10)	uA	V_R = 20V (V_R = 10V)

Absolute Maximum Ratings at T_A=25°C

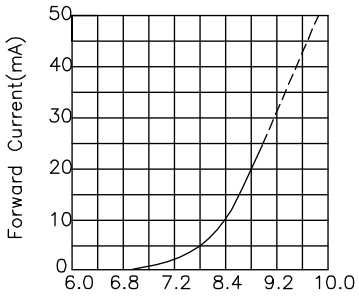
Parameter	Super Bright Green	Units
Power dissipation Per Segment (DP)	250(125)	mW
DC Forward Current Per Segment (DP)	25(25)	mA
Peak Forward Current [1] Per Segment (DP)	140(140)	mA
Reverse Voltage Per Segment (DP)	20(10)	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

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

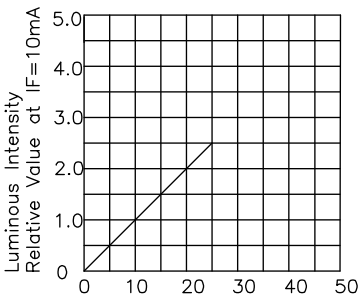


RELATIVE INTENSITY Vs. WAVELENGTH

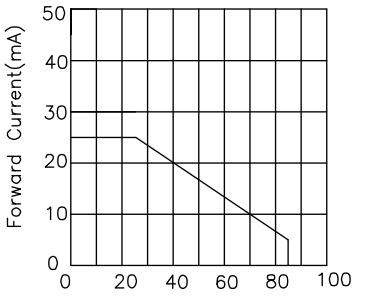
Super Bright Green **SA23-12SGWB**



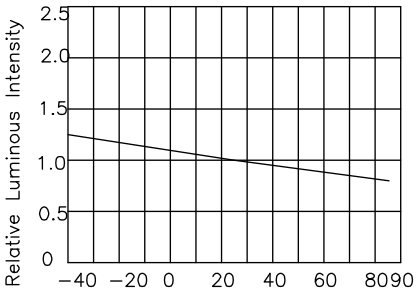
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

Remarks:
If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:
1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V
Note: Accuracy may depend on the sorting parameters.