Kingbright

100mm (4.0INCH) SINGLE DIGIT NUMERIC DISPLAY

P/N: SA40-19SRWA SUPER BRIGHT RED

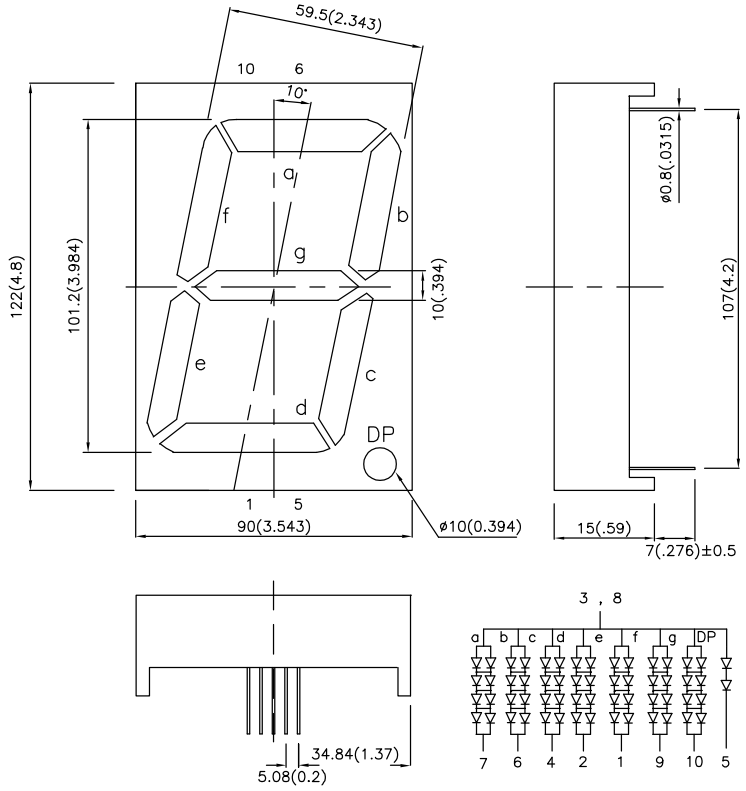
Features

- LARGE SIZE.
- 4.0 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.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red 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.	
SA40-19SRWA	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	26000	105000	Common Anode, Rt. Hand Decimal.

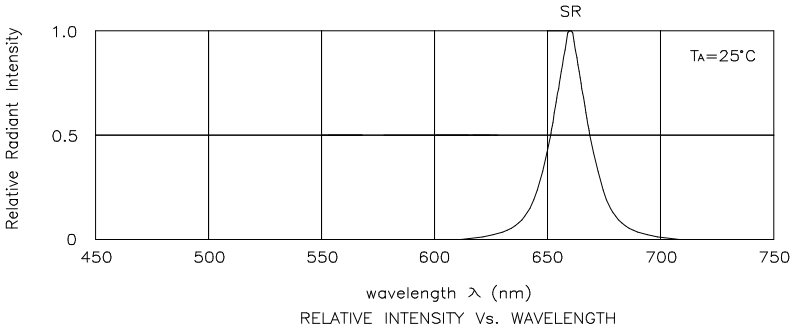
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	I_F=20mA
λD	Dominant Wavelength	Super Bright Red	640		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	I_F=20mA
C	Capacitance	Super Bright Red	45		pF	V_F=0V;f=1MHz
V_F	Forward Voltage Per Segment Or (DP)	Super Bright Red	7.2 (3.6)	10 (5.0)	V	I_F=20mA
I_R	Reverse Current Per Segment Or (DP)	Super Bright Red		20 (10)	uA	V_R = 20V (V_R = 10V)

Absolute Maximum Ratings at T_A=25°C

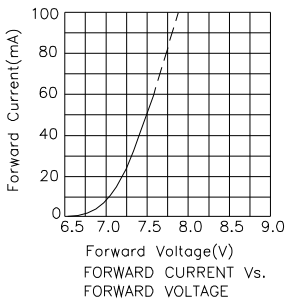
Parameter	Super Bright Red	Units
Power dissipation Per Segment Or (DP)	600(150)	mW
DC Forward Current Per Segment Or (DP)	60(30)	mA
Peak Forward Current [1] Per Segment Or (DP)	310(155)	mA
Reverse Voltage Per Segment Or (DP)	20(10)	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

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

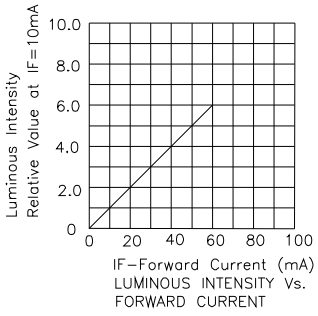


RELATIVE INTENSITY Vs. WAVELENGTH

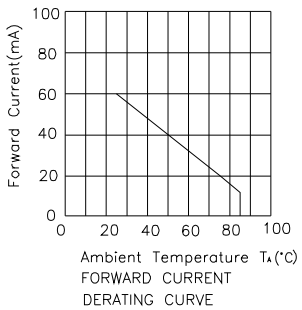
Super Bright Red **SA40-19SRWA**



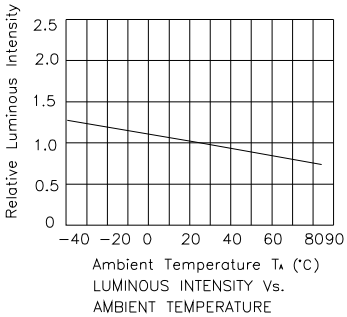
FORWARD CURRENT Vs.
FORWARD VOLTAGE



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/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.