

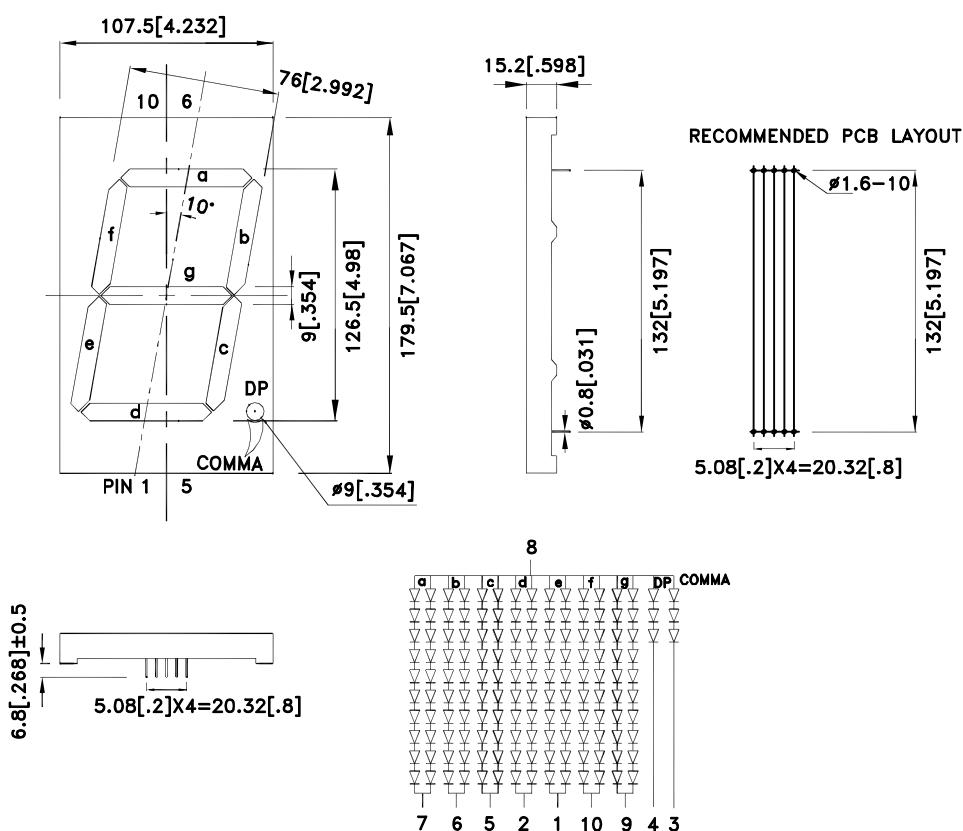
Features

- 5.0 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 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 $\pm 0.25(0.01")$ 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.	
SA50-31SRWA	Super Bright Red (GaAlAs)	WHITE DIFFUSED	44000	132000	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	Super Bright Red	660		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Super Bright Red	640		nm	I _F =20mA
$\Delta\lambda_{1/2}$	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 [2]	Forward Voltage Per Segment (DP and comma)	Super Bright Red	18.5 (5.55)	25 (7.5)	V	I _F =20mA
I _R	Reverse Current Per Segment (DP and comma)	Super Bright Red		20 (10)	uA	V _R =50V (V _R =15V)

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

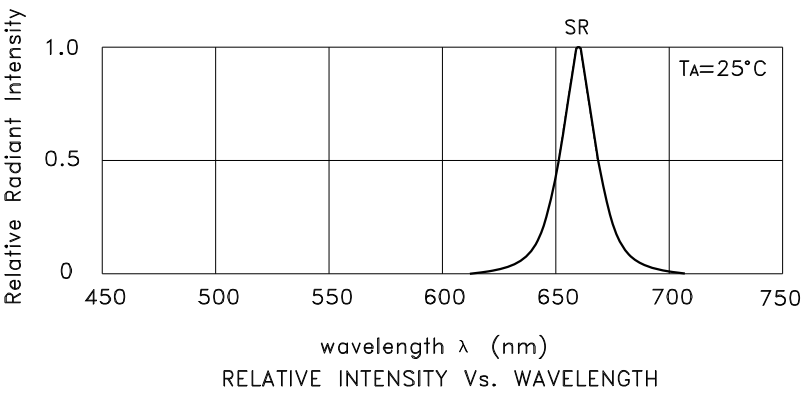
Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Red	Units
Power dissipation Per Segment (DP and comma)	1500(225)	mW
DC Forward Current Per Segment (DP and comma)	60(30)	mA
Peak Forward Current [1] Per Segment (DP and comma)	310(155)	mA
Reverse Voltage Per Segment (DP and comma)	50(15)	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

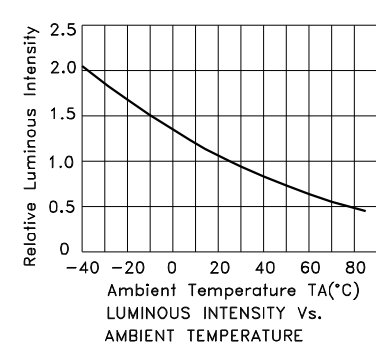
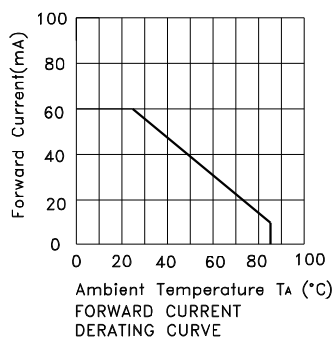
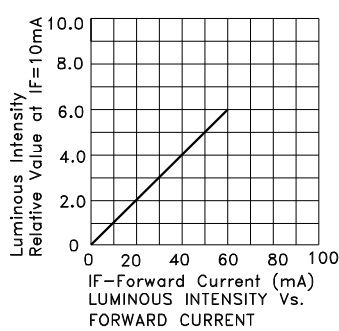
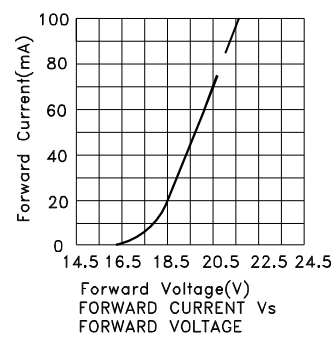
Notes:

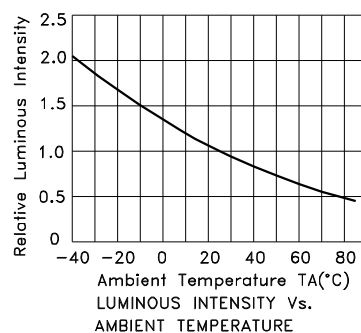
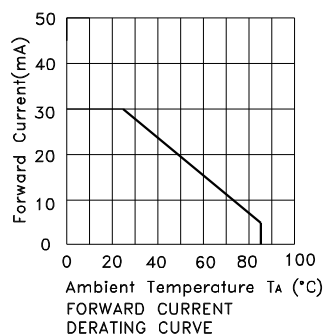
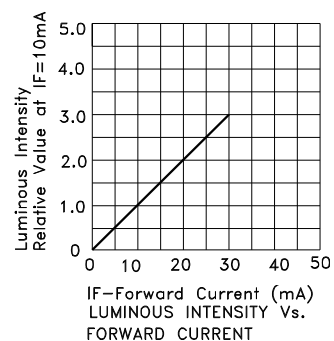
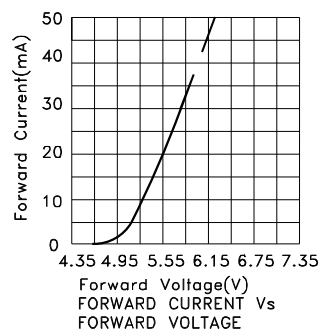
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.



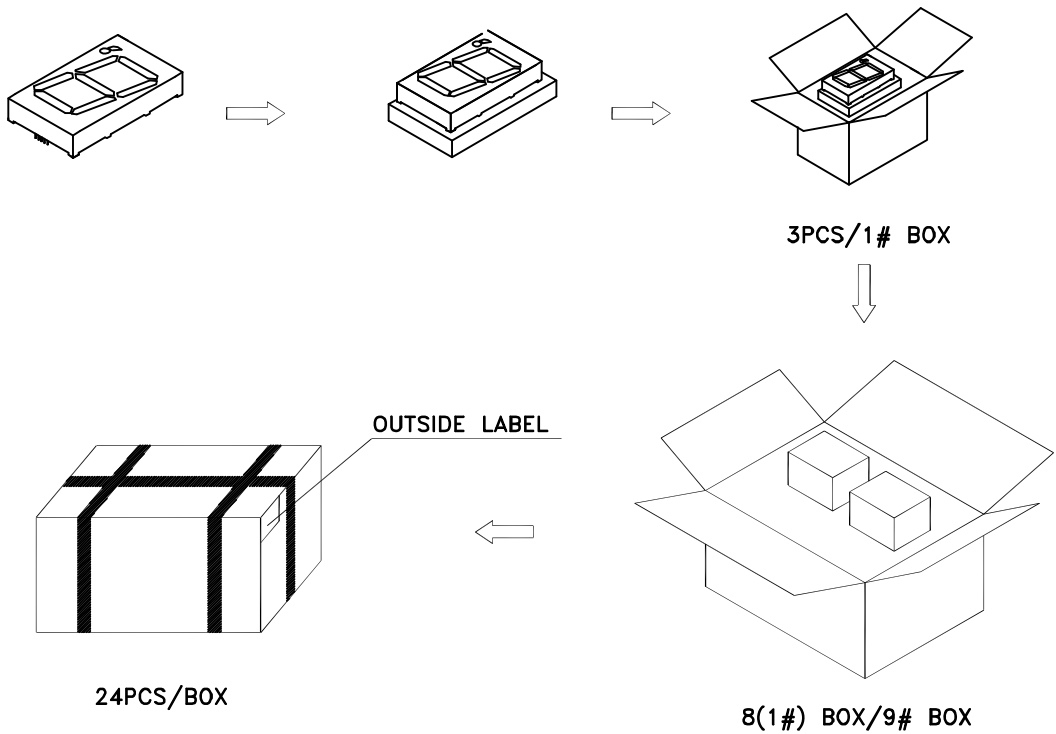
Super Bright Red SA50-31SRWA





PACKING & LABEL SPECIFICATIONS

SA50-31SRWA



Inside Label Paste On The 1#BOX

Kingbright	TYPE: Sx50-31xxx		Date
	QTY:3 PCS CODE: xx		
	xxxxxxxx-xxxx	Number OF FQC	
LOT NO.		RoHS Compliant	

Outside Label Paste On The Box

XXXXXX		Bin Code	Number OF QA
Sx50-31xxx			
24	PCS	XX	Date
		RoHS Compliant	