

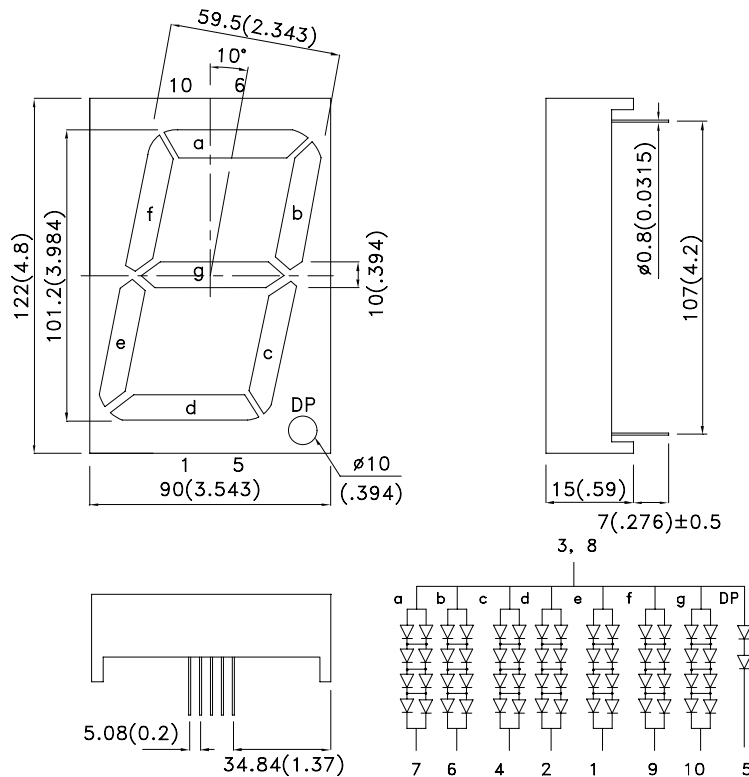
### Features

- 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  $\pm 0.25 (0.01)$  unless otherwise noted.
2. Specifications are subject to change without notice.



## Selection Guide

| Part No.    | Dice                      | Lens Type      | Iv (ucd) [1]<br>@ 10mA |        | Description                     |
|-------------|---------------------------|----------------|------------------------|--------|---------------------------------|
|             |                           |                | Min.                   | Typ.   |                                 |
| SA40-19SRWA | Super Bright Red (GaAlAs) | WHITE DIFFUSED | 26000                  | 105000 | 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                              |
|-----------------------|-------------------------------------|------------------|--------------|---------------|-------|--|
| $\lambda_{peak}$      | Peak Wavelength                     | Super Bright Red | 660          |               | nm    | I <sub>F</sub> =20mA                         |
| $\lambda_D$ [1]       | Dominant Wavelength                 | Super Bright Red | 640          |               | nm    | I <sub>F</sub> =20mA                         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width            | Super Bright Red | 20           |               | nm    | I <sub>F</sub> =20mA                         |
| C                     | Capacitance                         | Super Bright Red | 45           |               | pF    | V <sub>F</sub> =0V;f=1MHz                    |
| V <sub>F</sub> [2]    | Forward Voltage Per Segment Or (DP) | Super Bright Red | 7.4<br>(3.7) | 10.0<br>(5.0) | V     | I <sub>F</sub> =20mA                         |
| I <sub>R</sub>        | Reverse Current Per Segment Or (DP) | Super Bright Red |              | 10<br>(10)    | uA    | V <sub>R</sub> =20V<br>(V <sub>R</sub> =10V) |

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 Or (DP)        | 600<br>(150)          | mW    |
| DC Forward Current Per Segment Or (DP)       | 60<br>(30)            | mA    |
| Peak Forward Current [1] Per Segment Or (DP) | 310<br>(155)          | mA    |
| Reverse Voltage Per Segment Or (DP)          | 20<br>(10)            | V     |
| Operating / Storage Temperature              | -40°C To +85°C        |       |
| Lead Solder Temperature[2]                   | 260°C For 3-5 Seconds |       |

Notes:

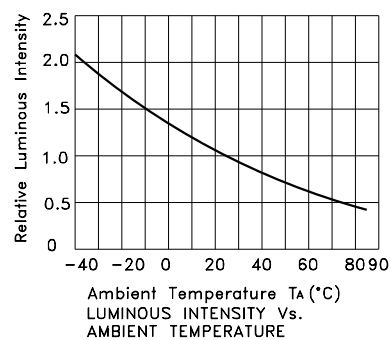
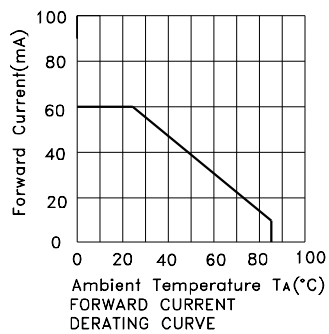
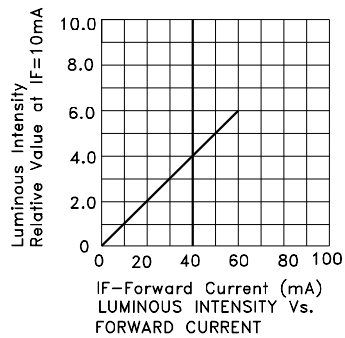
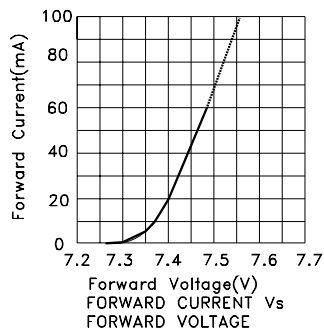
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

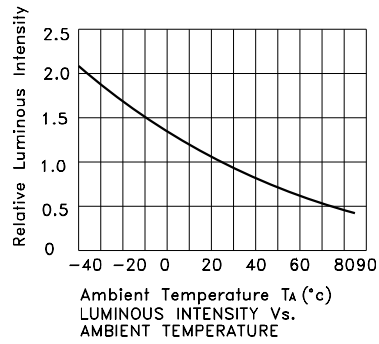
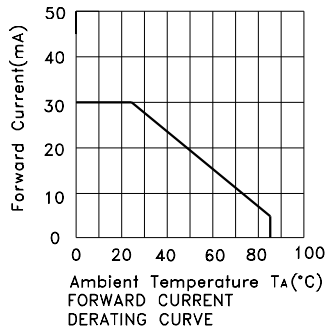
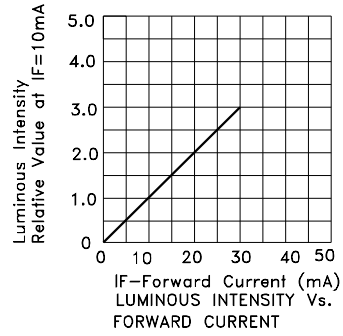
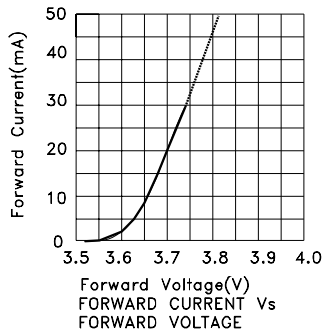
2. 2mm below package base.



## Super Bright Red

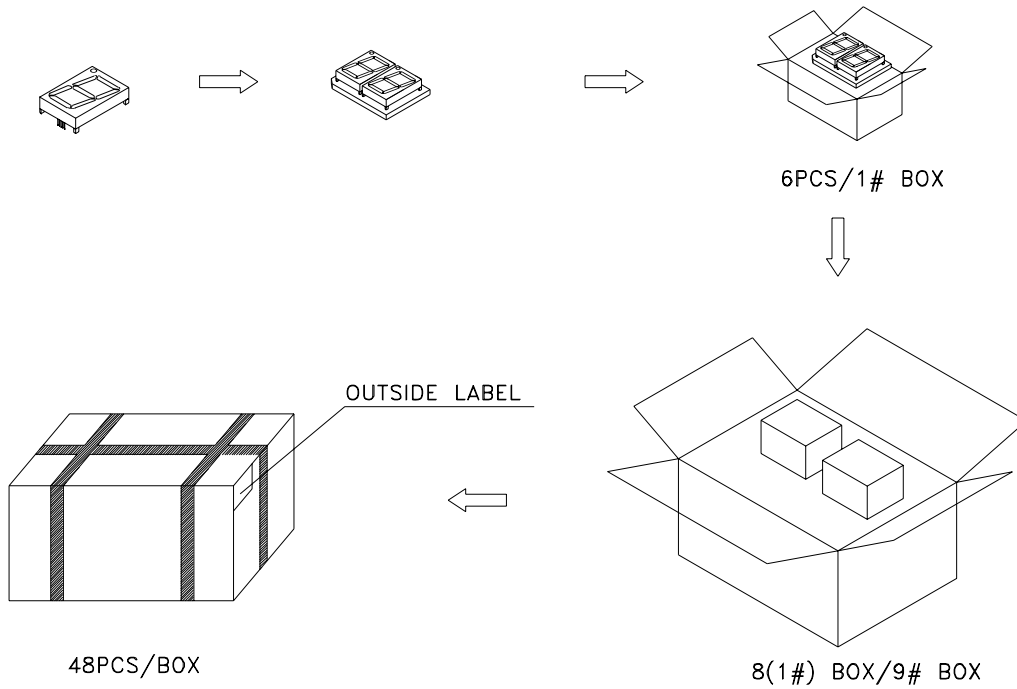
## SA40-19SRWA



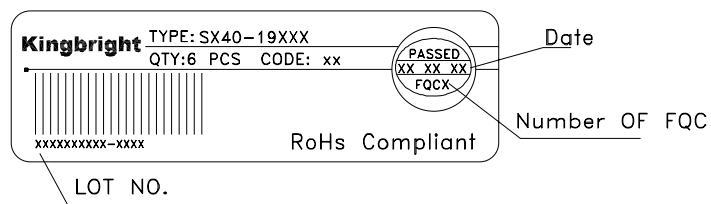


## PACKING & LABEL SPECIFICATIONS

## SA40-19SRWA



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box

