

TC23-11SRWA

SUPER BRIGHT RED

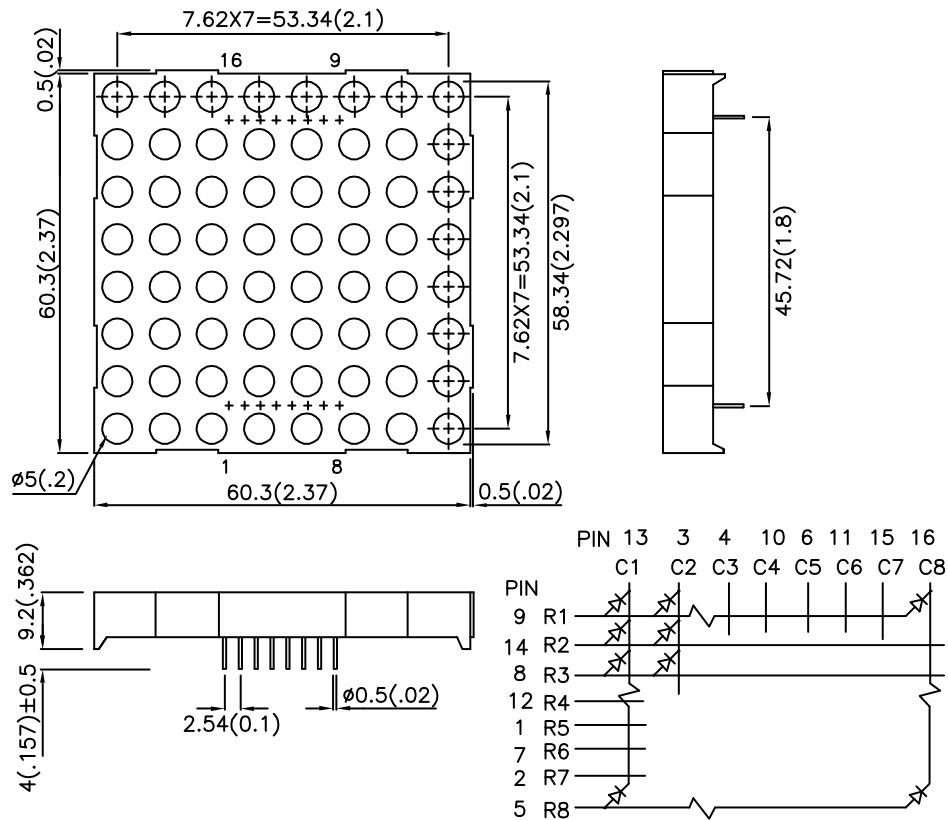
### Features

- 2.3 INCH MATRIX HEIGHT.
- DOT SIZE 5mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- COLUMN CATHODE AND COLUMN ANODE AVAILABLE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE DOT.
- 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)<br>@ 10mA |       | Description    |
|-------------|---------------------------|----------------|--------------------|-------|----------------|
|             |                           |                | Min.               | Typ.  |                |
| TC23-11SRWA | SUPER BRIGHT RED (GaAIAs) | WHITE DIFFUSED | 12000              | 44000 | Column Cathode |

## Electrical / Optical Characteristics at TA=25°C

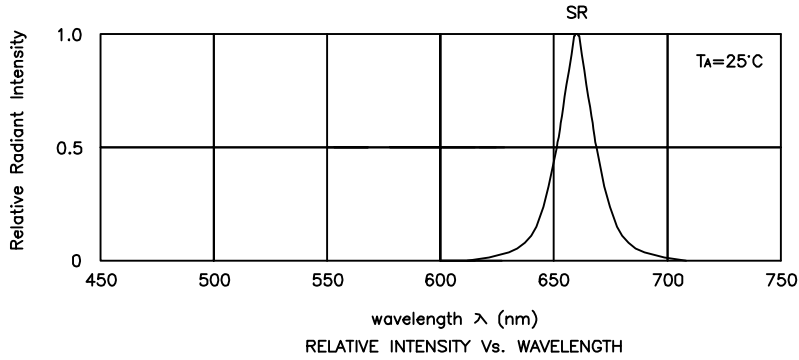
| Symbol                | Parameter                | Device           | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Red | 660  |      | nm    | IF=20mA         |
| $\lambda_D$           | Dominant Wavelength      | Super Bright Red | 640  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Red | 20   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Super Bright Red | 45   |      | pF    | VF=0V;f=1MHz    |
| VF                    | Forward Voltage          | Super Bright Red | 1.85 | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | Super Bright Red |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Super Bright Red    | Units |
|---------------------------------|---------------------|-------|
| Power dissipation               | 100                 | mW    |
| DC Forward Current              | 30                  | mA    |
| Peak Forward Current [1]        | 155                 | mA    |
| Reverse Voltage                 | 5                   | V     |
| Operating / Storage Temperature | -40°C To +85°C      |       |
| Lead Solder Temperature [2]     | 260°C For 5 Seconds |       |

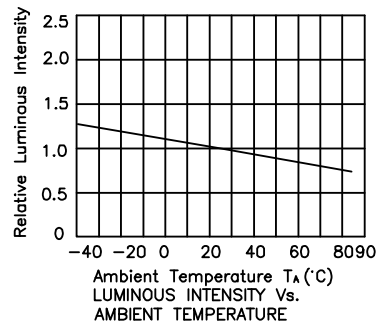
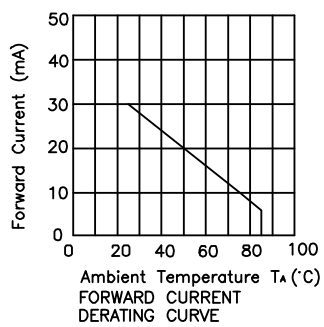
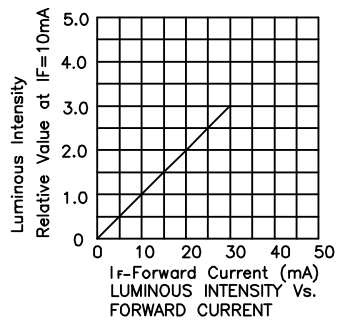
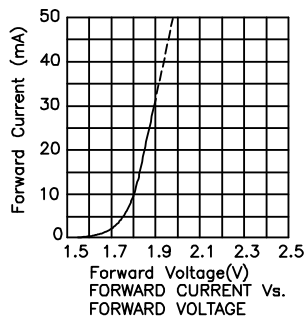
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 5mm below package base.



## Super Bright Red

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### 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:  $\pm 1\text{nm}$
2. Luminous Intensity:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.