

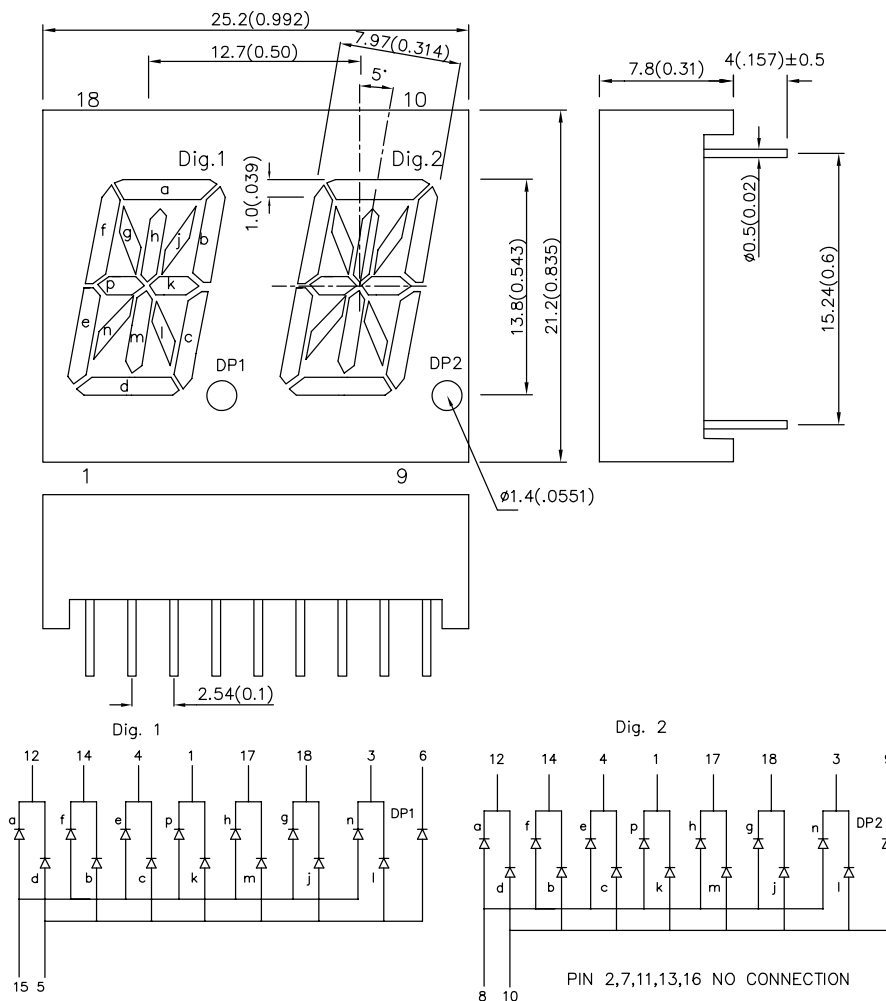
### Features

- 0.54 INCH CHARACTER HEIGHT.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- 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]<br>@ 10mA |       | Description                        |
|--------------|---------------------------|----------------|------------------------|-------|------------------------------------|
|              |                           |                | Min.                   | Typ.  |                                    |
| PDA54-12SRWA | SUPER BRIGHT RED (GaAlAs) | WHITE DIFFUSED | 4700                   | 18000 | Common Anode, Rt.<br>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    | IF=20mA         |
| $\lambda_D$ [1]       | 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 [2]                | Forward Voltage<br>Per Segment or DP | Super Bright Red | 1.85 | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current<br>Per Segment or DP | Super Bright Red |      | 10   | uA    | VR = 5V         |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

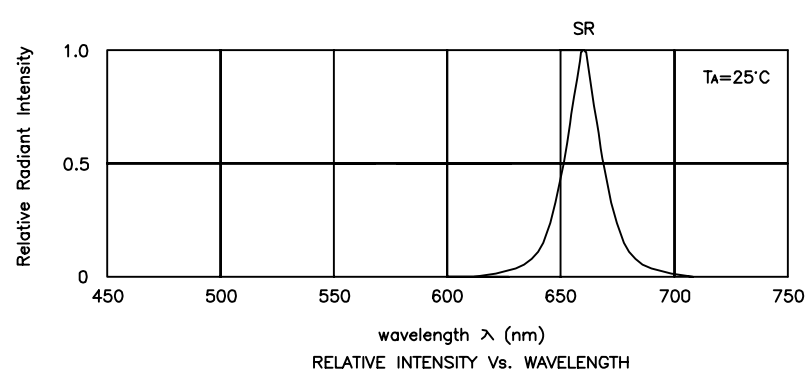
## Absolute Maximum Ratings at TA=25°C

| Parameter                                     | Super Bright Red    | Units |
|-----------------------------------------------|---------------------|-------|
| Power dissipation<br>Per Segment or DP        | 100                 | mW    |
| DC Forward Current<br>Per Segment or DP       | 30                  | mA    |
| Peak Forward Current [1]<br>Per Segment or DP | 155                 | mA    |
| Reverse Voltage<br>Per Segment or DP          | 5                   | V     |
| Operating / Storage Temperature               | -40°C To +85°C      |       |
| Lead Solder Temperature [2]                   | 260°C For 3 Seconds |       |

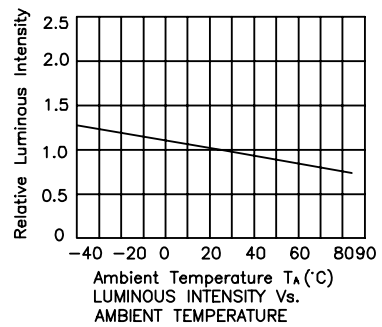
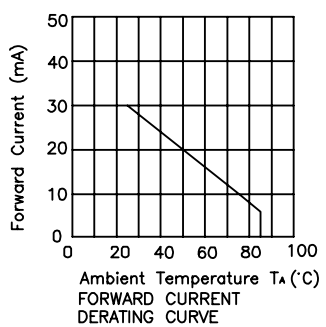
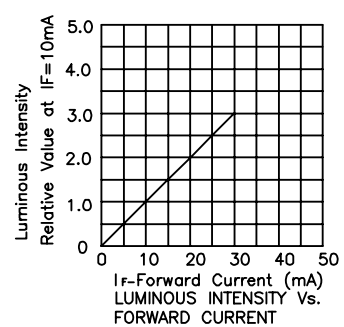
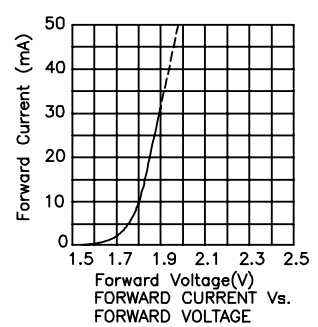
Notes:

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

2. 2mm below package base.



Super Bright Red PDA54-12SRWA



PACKING & LABEL SPECIFICATIONS

PDA54-12SRWA

