

# KW1-391AURB

## DATA SHEET

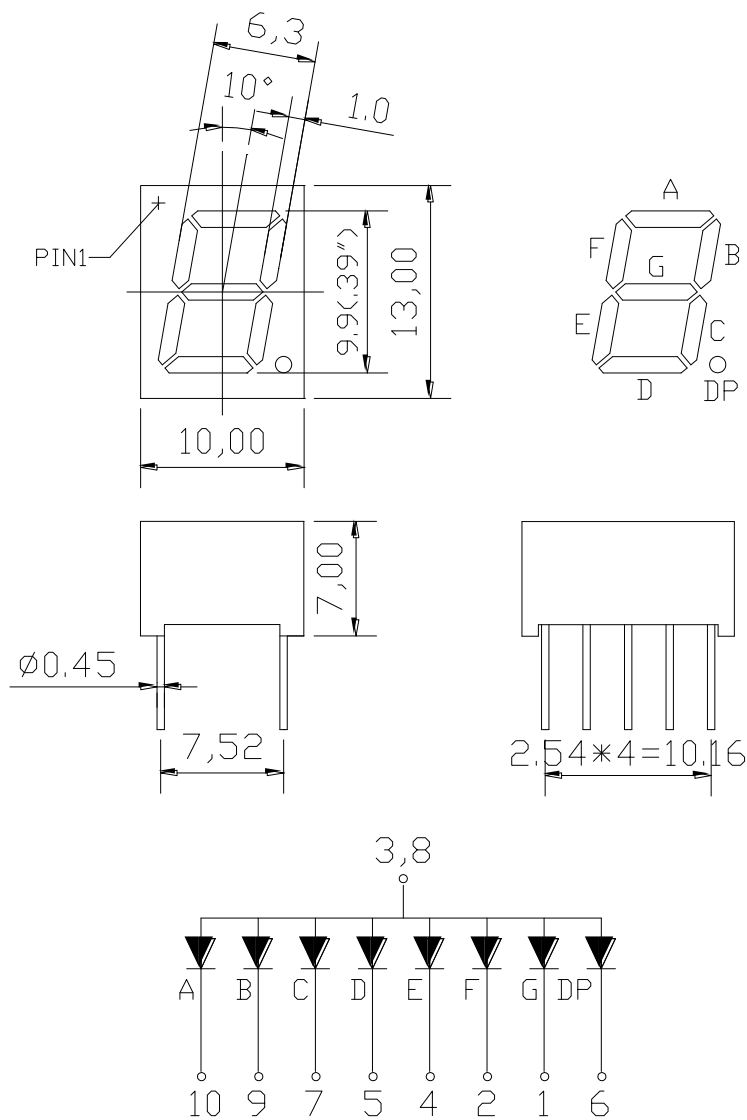
QC :

ENG :

Prepared By:

|          |             |          |               |      |        |
|----------|-------------|----------|---------------|------|--------|
| Part No. | KW1-391AURB | Spec No. | S/N-080410003 | Page | 1 of 4 |
|----------|-------------|----------|---------------|------|--------|

Package Dimensions:



| Part NO.    | Chip Material | Source Color     | Face  | Segment |
|-------------|---------------|------------------|-------|---------|
| KW1-391AURB | AlGaInP       | Super Bright Red | Black | White   |

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
- 3. Specifications are subject to change without notice.

**Absolute Maximum Ratings at Ta=25°C**

| Parameter                                                    | MAX.                | Unit  |
|--------------------------------------------------------------|---------------------|-------|
| Power Dissipation (per segment)                              | 50                  | mW    |
| Peak Forward Current<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | 25                  | mA    |
| Continuous Forward Current                                   | 20                  | mA    |
| Derating Linear From 50°C                                    | 0.4                 | mA/°C |
| Reverse Voltage                                              | 5                   | V     |
| Operating Temperature Range                                  | -40°C to +80°C      |       |
| Storage Temperature Range                                    | -40°C to +80°C      |       |
| Lead Soldering Temperature<br>[1.6mm(.063") From Body]       | 260°C for 5 Seconds |       |

**Electrical Optical Characteristics at Ta=25°C**

| Parameter                | Symbol         | Min. | Typ. | Max. | Unit | Test Condition                |
|--------------------------|----------------|------|------|------|------|-------------------------------|
| Luminous Intensity       | I <sub>v</sub> | 15   | 20   | 35   | mcd  | I <sub>f</sub> =20mA (Note 1) |
| Peak Emission Wavelength | λ <sub>p</sub> | 630  | 635  | 640  | nm   | I <sub>f</sub> =20mA          |
| Spectral Line Half-Width | △λ             | 15   | 20   | 25   | nm   | I <sub>f</sub> =20mA          |
| Forward Voltage          | V <sub>f</sub> | 1.8  | 2.0  | 2.4  | V    | I <sub>f</sub> =20mA          |
| Reverse Current          | I <sub>R</sub> | ---  | ---  | 10   | μA   | V <sub>R</sub> =5V            |

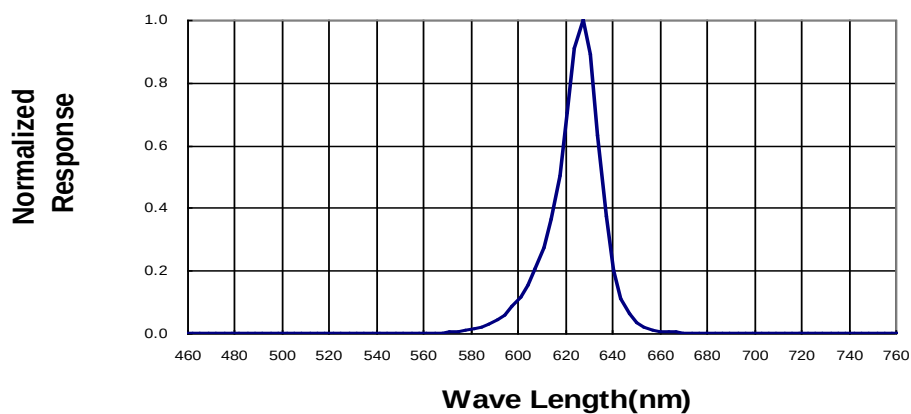
**Notes:**

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

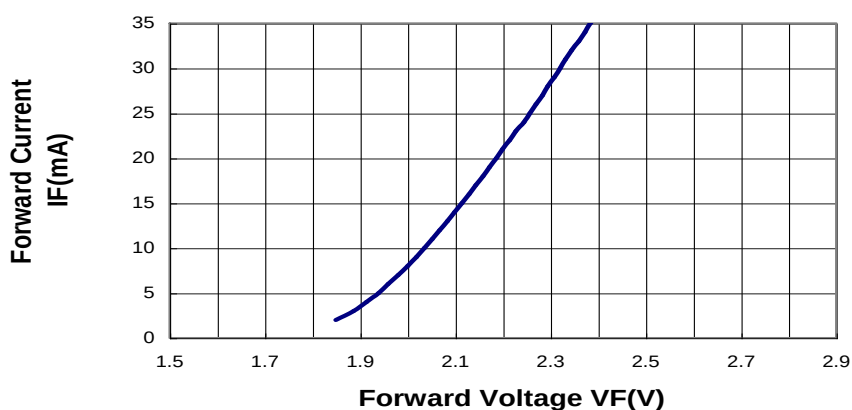
## Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

**Spectral Radiance (Peak @ 635 nm)**



**Forward Current vs Forward Voltage**



**Relative Luminous Intensity vs Forward Current**

