



## Seven Segment Display Data Sheet

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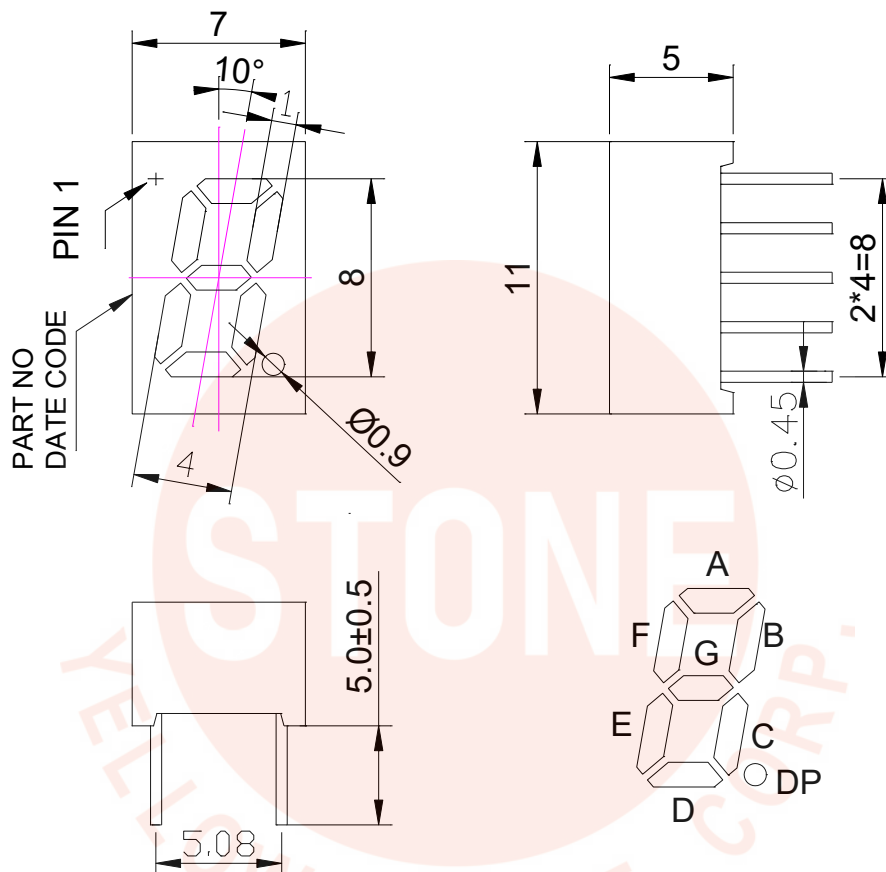
### Description

This YDS-31211AR-N is a 0.32 inch (8.0mm) digit height single digit seven-segment display. This device uses AlInGaP Red LED chips ( AlInGaP epi on GaAs substrate), and has a gray face and white segments.

### Features

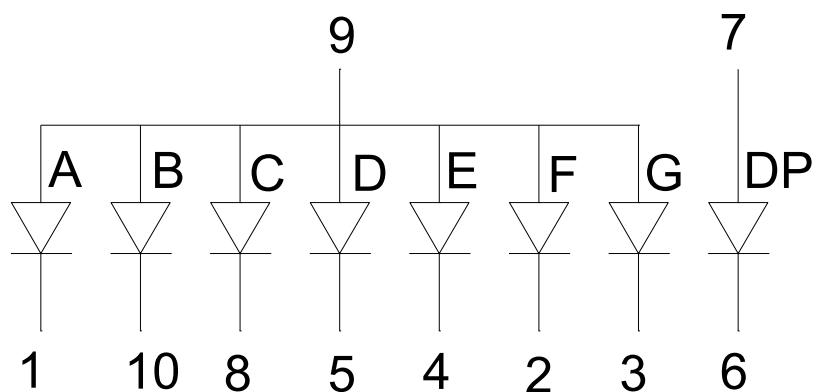
- 0.32-inch (8.0 mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

## Package Dimensions



1. All dimensions are in millimeters. Tolerances are 0.25 mm (0.01") unless otherwise noted.

## Internal Circuit Diagrams LA-301VL



### Absolute Maximum Rating (Ta = 25°C)

| Parameter                                                             | Max.           | Unit |
|-----------------------------------------------------------------------|----------------|------|
| Power Dissipation Per Segment                                         | 75             | mW   |
| Peak Forward Current Per Segment<br>( Frequency 1Khz, 10% duty cycle) | 90             | mA   |
| Continuous Forward Current Per Segment                                | 30             | mA   |
| Reverse Voltage Per Segment                                           | 5              | V    |
| Operating Temperature Range                                           | -35°C to +85°C |      |
| Storage Temperature Range                                             | -35°C to +85°C |      |

Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C

This product should be operated in forward bias. If a reverse voltage is continuously applied to the product, such operation can cause migration resulting in LED damage.

### Electrical / Optical Characteristics (Ta = 25°C)

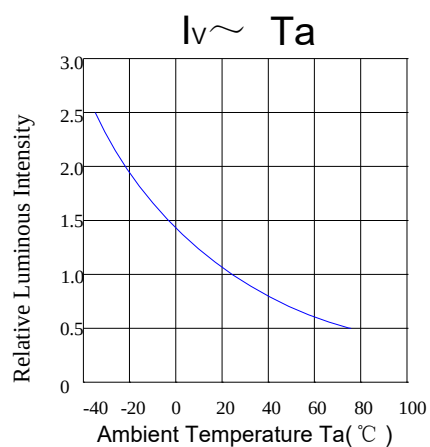
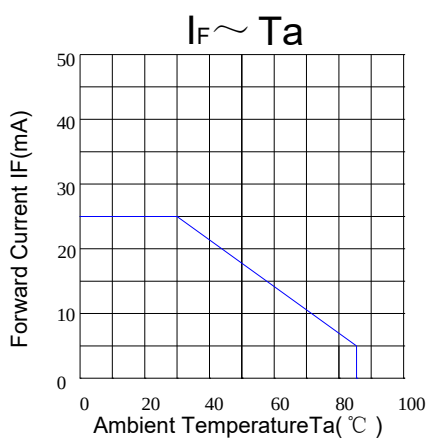
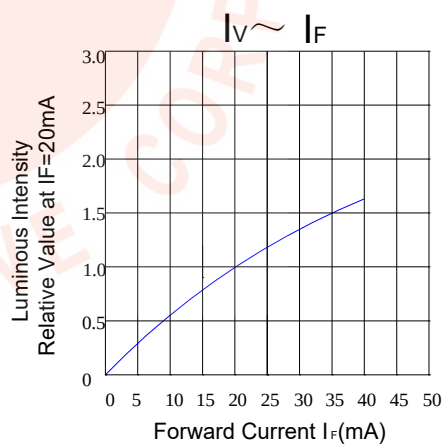
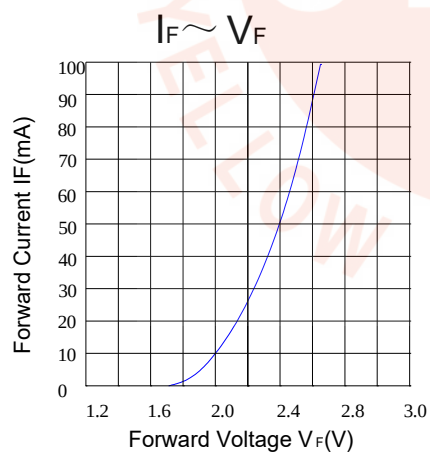
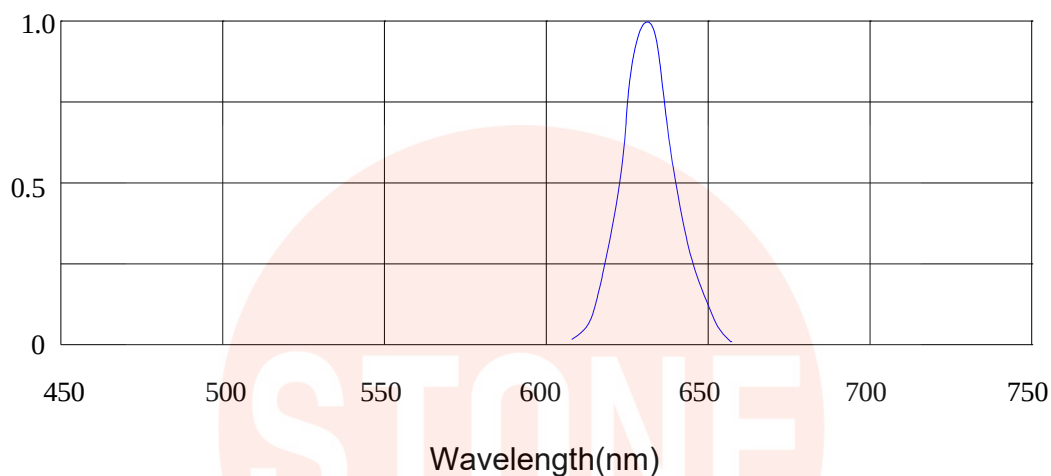
| Parameter                         | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-----------------------------------|--------|------|------|------|------|----------------|
| Average Luminous Intensity        | Iv     | 37   |      |      | mcd  | IF=20mA        |
| Peak Emission Wavelength          | λp     |      | 632  |      | nm   | IF=20mA        |
| Spectral Line Half-Width          | Δλ     |      | 20   |      | nm   | IF=20mA        |
| Dominant Wavelength               | λd     |      | 624  |      | nm   | IF=20mA        |
| Forward Voltage Per Segment       | VF     |      | 2.05 | 2.6  | V    | IF=20mA        |
| Reverse Current Per Segment       | IR     |      |      | 10   | μA   | VR=5V          |
| Luminous Intensity Matching Ratio | Iv-m   |      |      | 2:1  |      | IF=20mA        |

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

## Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

### RELATIVE INTENSITY vs WAVELENGTH





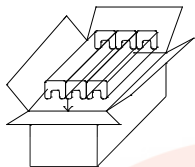
早安股份有限公司  
YELLOW STONE CORP.

PART NO.  
DATE CODE

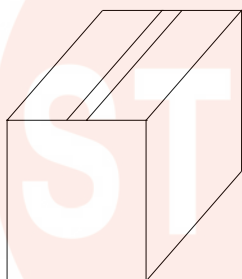
## Package Flow



45PCS/TUBE



4860PCS/I-CARTON



19440PCS/O-CARTON

