

Seven Segment Display Data Sheet

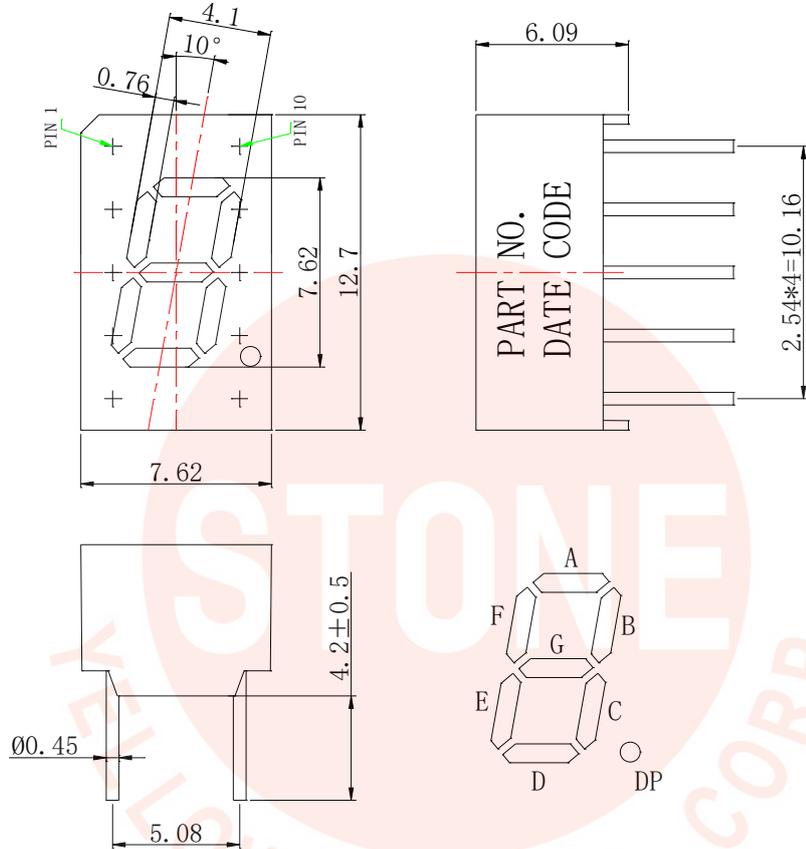
Description

This YDS-3106AR-N is a 0.3 inch (7.62mm) digit height single digit seven-segment display. This device uses AlInGaP RED LED chips(AlInGaP on a non-transparent substrate). The display has a black face and white segments.

Features

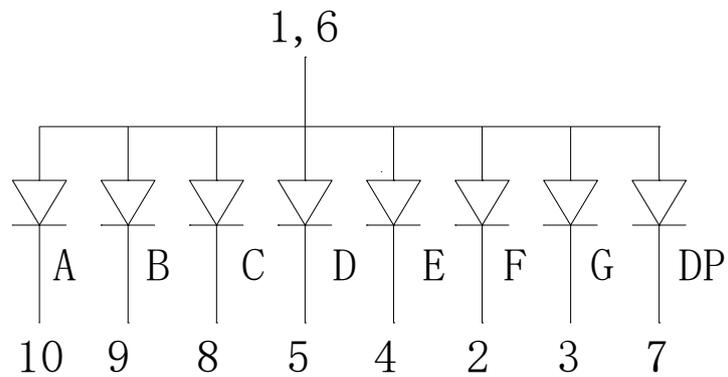
- 0.3-inch (7.62mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



NOTES: 1.All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.

Internal Circuit Diagram



Absolute Maximum Rating (Ta = 25°C)

Parameter	Max.	Unit
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 15% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +85 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +85 ⁰ C	
Soldering Conditions:Max 260 ⁰ C for max 3sec at 1.6mm below seating plane.		

Remarks:

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	5	10		mcd	IF=10mA
Peak Emission Wavelength	λp		639		nm	IF=20mA
Spectral Line Half-Width	Δλ		20		nm	IF=20mA
Dominant Wavelength	λd		631		nm	IF=20mA
Forward Voltage Per Segment	VF		2.0	2.6	V	IF=20mA
Reverse Current Per Segment	IR			10	μA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

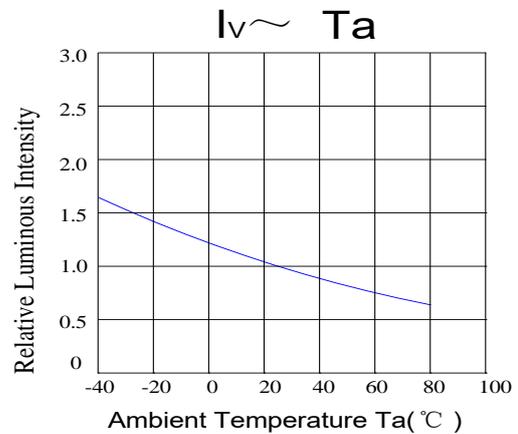
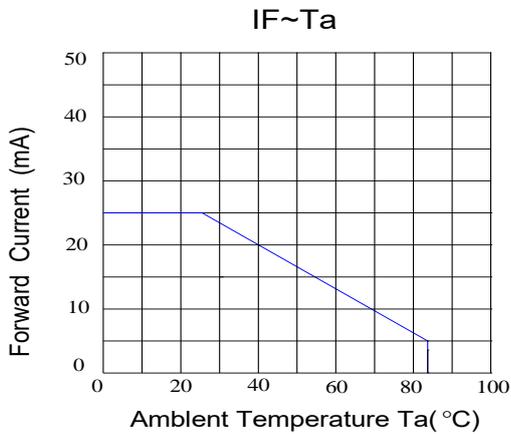
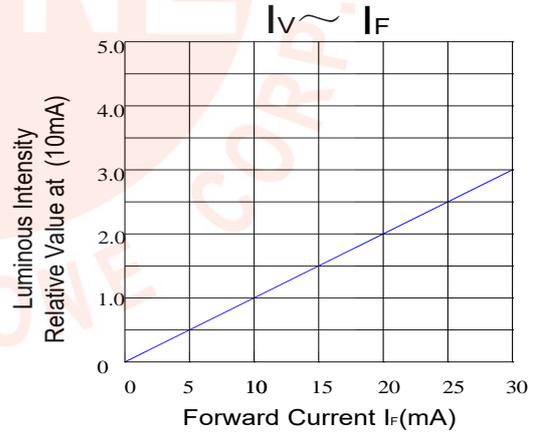
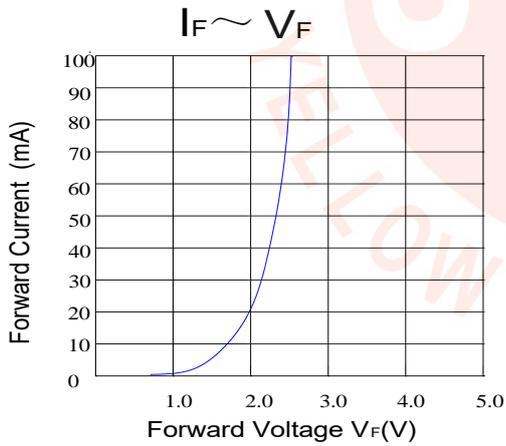
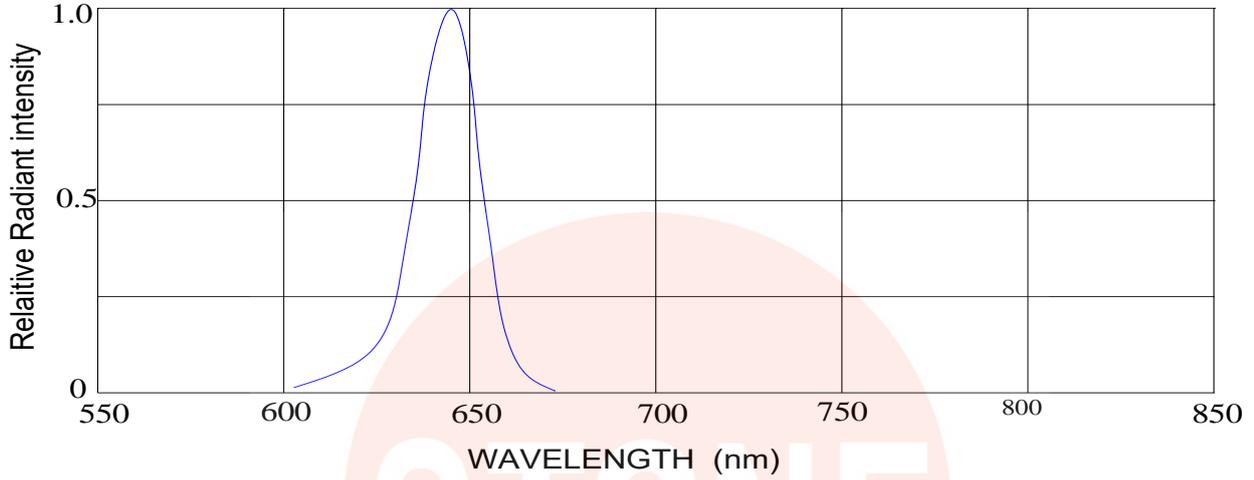
Note:

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





Package Flow

