



Seven Segment Display Data Sheet

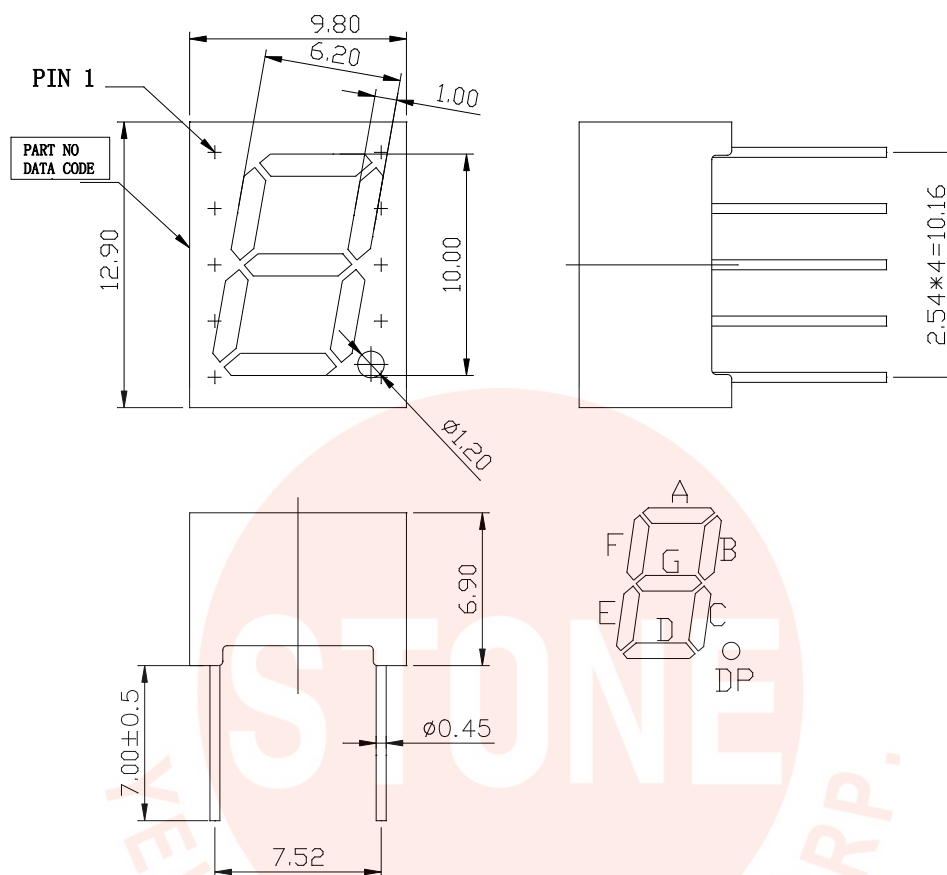
Description

This YDS-31931AW-N is a 0.39 inch (10 mm) digit height single digit display. This device uses blue LED chips (InGaN epi on SiC substrate) and YAG. The display has black face and yellow segments.

Features

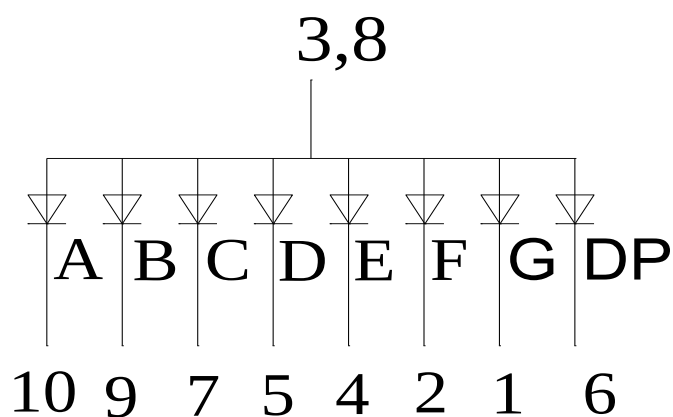
- 0.39 inch (10 mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



1. All dimensions are in millimeters. Tolerances are 0.25 mm (0.01") unless otherwise noted.
2. Pin tip's shift tolerance is ± 0.40 mm.

Internal Circuit Diagrams



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)	100	mA
Continuous Forward Current Per Segment	20	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-40°C to +100°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	21.8	44		mcd	IF=10mA
CIE	x		0.24			IF=20mA
	y		0.22			IF=20mA
Forward Voltage Per Segment	VF		3.3	3.8	V	IF=20mA
Reverse Current Per Segment	IR			10	μA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

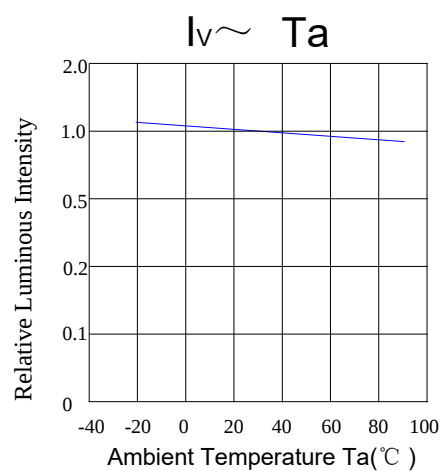
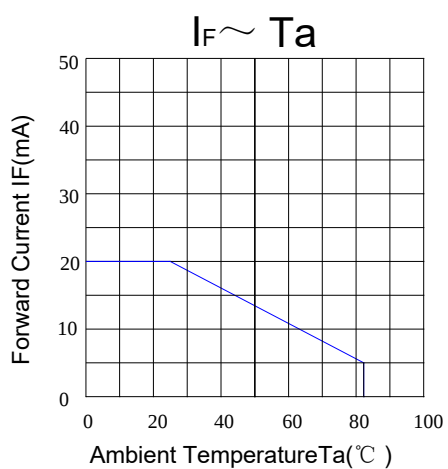
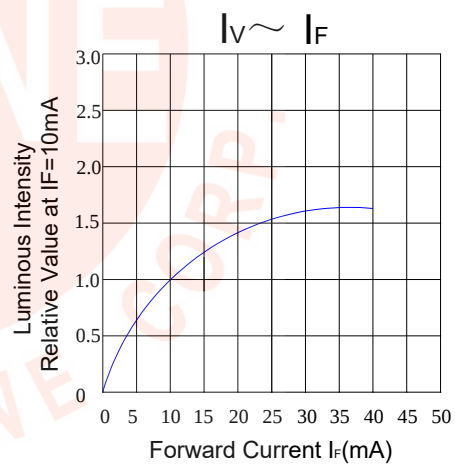
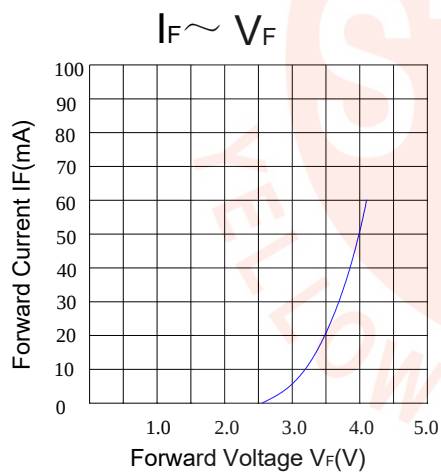
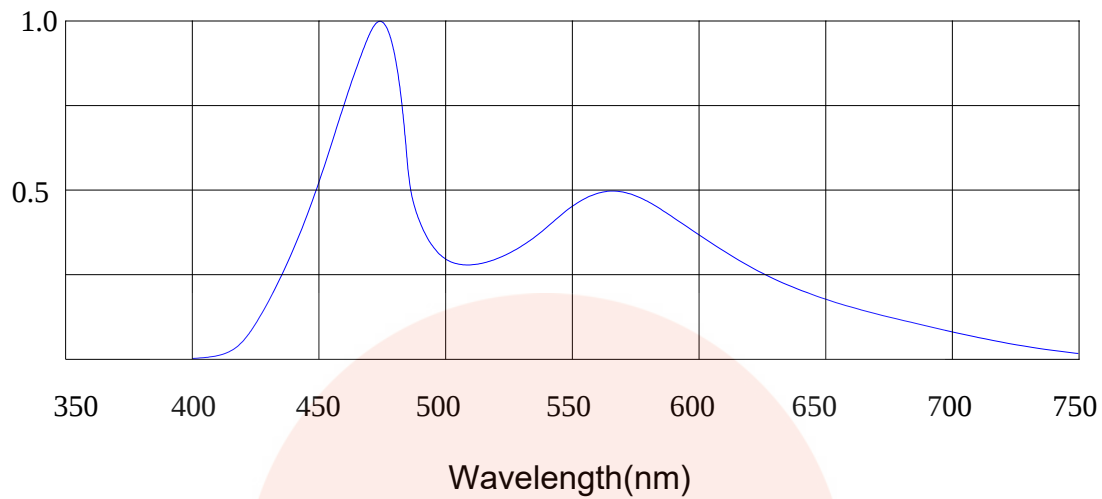
Note:1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

2.Wavelength: +/-1nm Luminous Intensity: +/-15% Forward Voltage: +/-0.1V

Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

RELATIVE INTENSITY vs WAVELENGTH



Package Flow

