Seven Segment Display Data Sheet

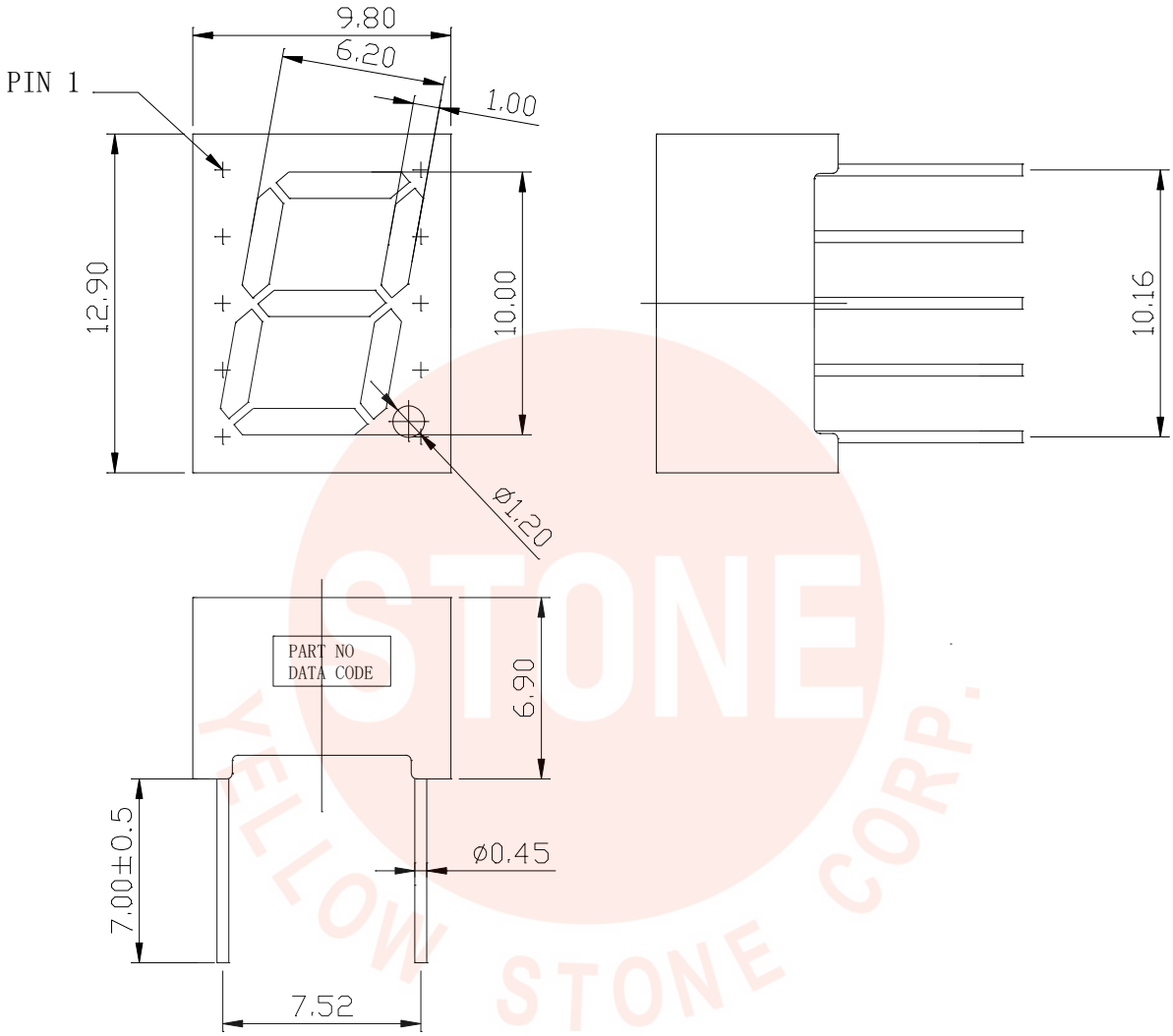
Description

This YDS-31910AB-N is a 0.39 inch (10mm) digit height single digit seven-segment display.
This device uses blue LED chips(InGaN epi on SiC substrate) and YAG,
The display has black face and yellow segments.

Features

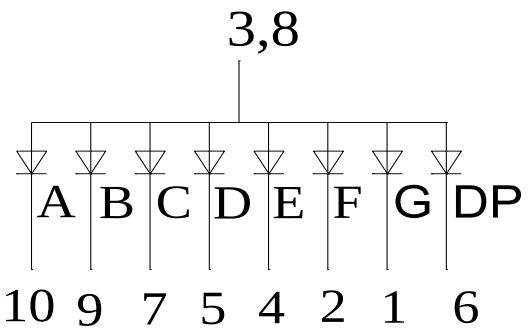
- 0.39-inch (10 mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



All dimensions are in millimeters. Tolerances are 0.25 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)	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	-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.

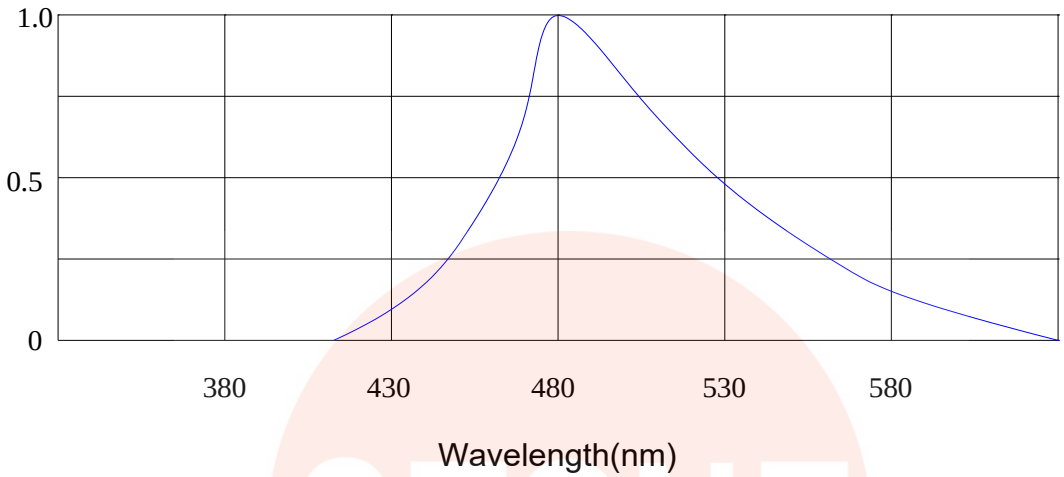
Electrical / Optical Characteristics (Ta = 25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	20	35		mcd	IF=10mA
Peak Emission Wavelength	λp		465		nm	IF=20mA
Spectral Line Half-Width	△λ		25		nm	IF=20mA
Dominant Wavelength	λd		468		nm	IF=20mA
Forward Voltage Per Segment	VF		3.0	3.6	V	IF=20mA
Reverse Current Per Segment	IR			10	uA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

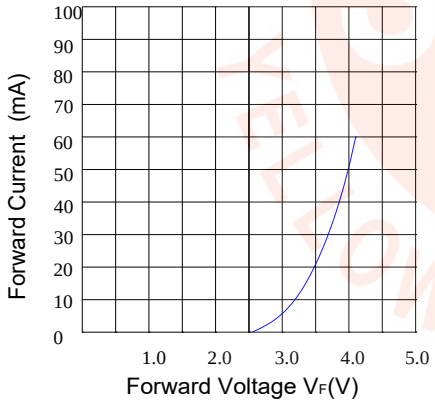
Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

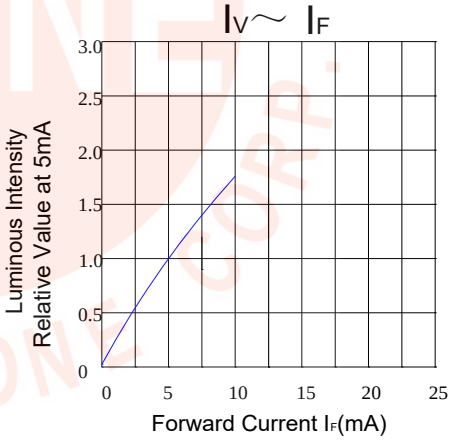
RELATIVE INTENSITY vs WAVELENGTH



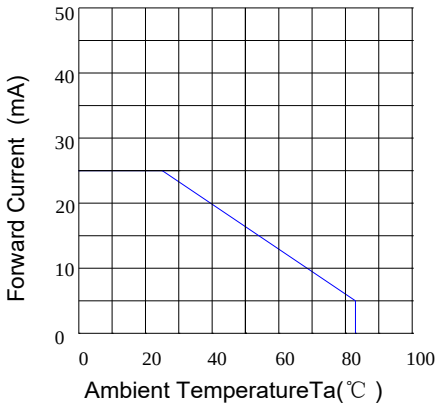
$I_F \sim V_F$



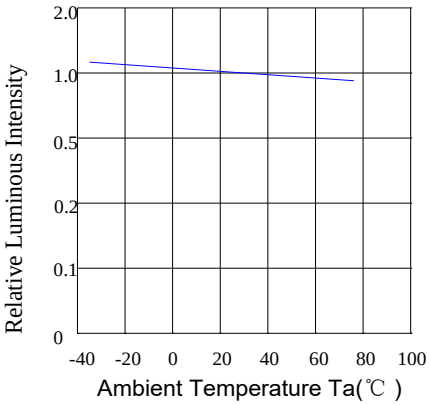
$I_V \sim I_F$



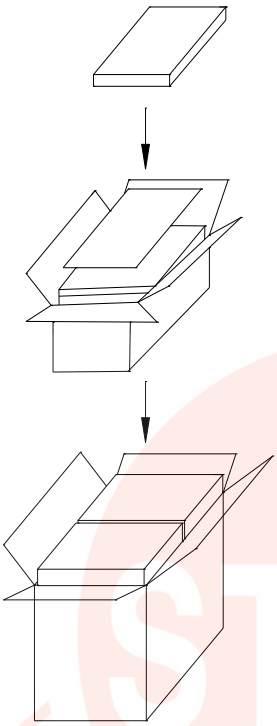
$I_F \sim Ta$



$I_V \sim Ta$



Package Flow



396PCS per PLATE

5148PCS per INNER CARTON

10296PCS per OUTER CARTON