

Seven Segment Display Data Sheet

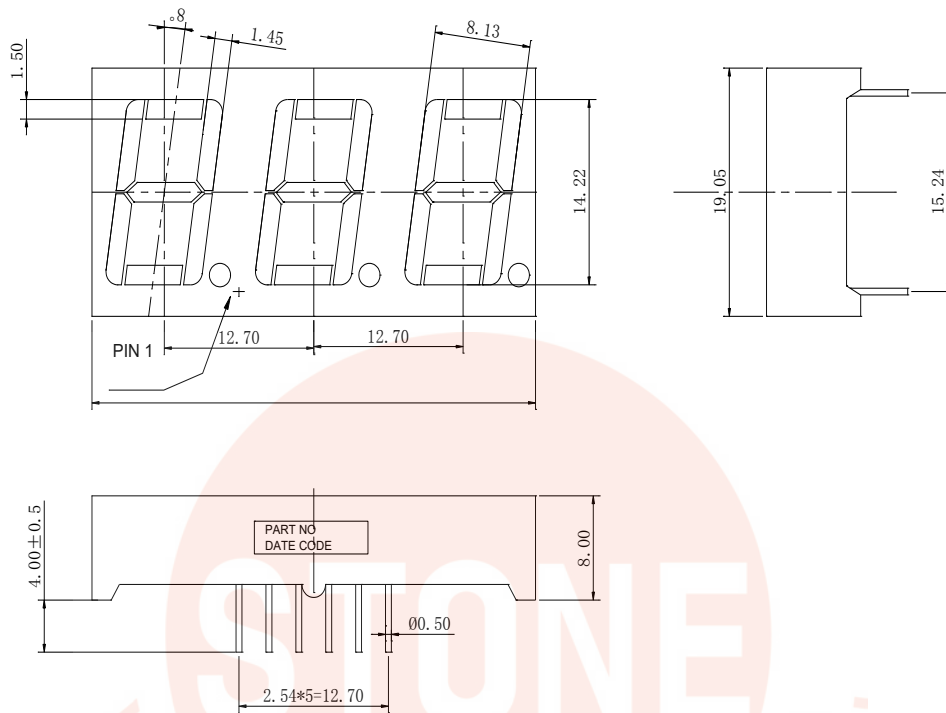
Description

The YDT-53647AY-N is a 0.56inch (14.2mm) digit height triple digit seven-segment display. This device utilizes Yellow LED chips ,which are made from AlInGaP on a non-transparent GaAs substrate. The display has a Black face and White segments.

Features

- 0.56 inch (14.2mm) 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

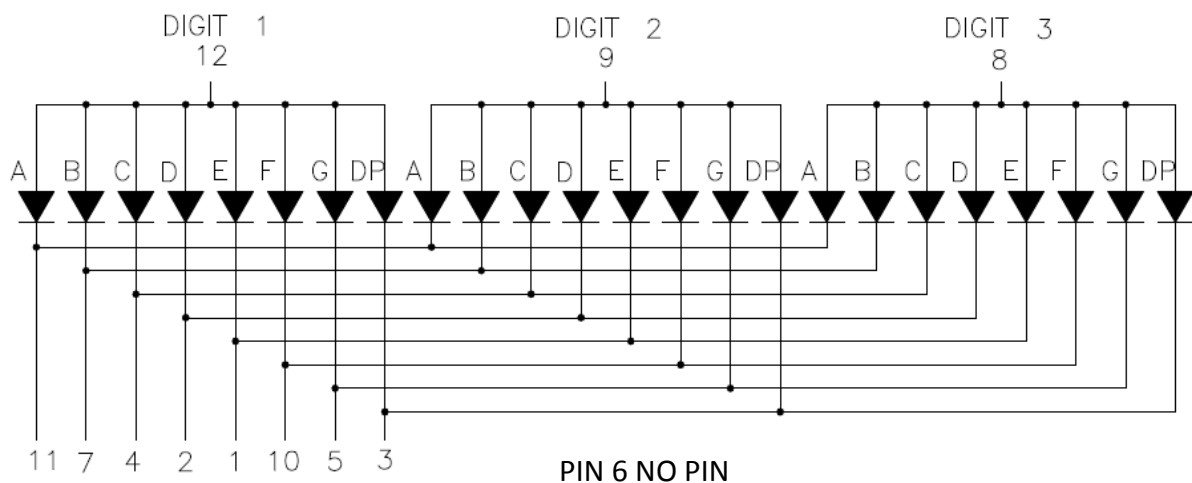
Package Dimensions



NOTES:

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

Internal Circuit Diagram





Absolute Maximum Rating (Ta = 25°C)

Parameter	Maximum	Unit
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 15% duty cycle)	60	mA
Continuous Forward Current Per Segment	25	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	8.6	13.7		mcd	IF=10mA
Peak Emission Wavelength	λ_p		588		nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$		15		nm	IF=20mA
Dominant Wavelength	λ_d		587		nm	IF=20mA
Forward Voltage Per Segment	VF		2.1	2.7	V	IF=20mA
Reverse Current Per Segment	IR			10	μ A	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

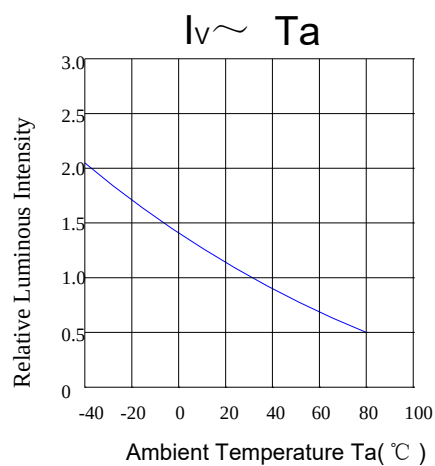
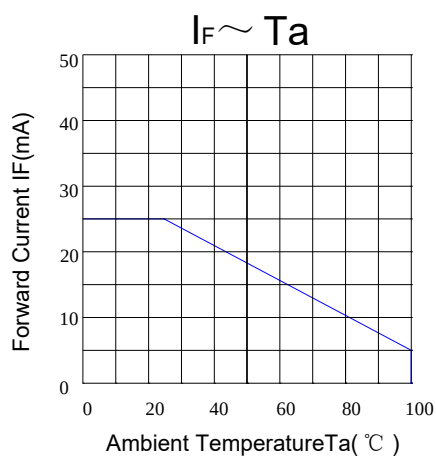
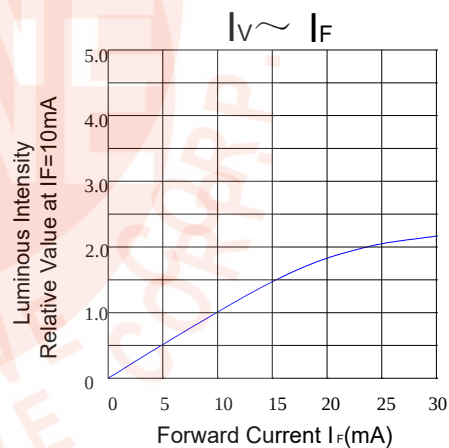
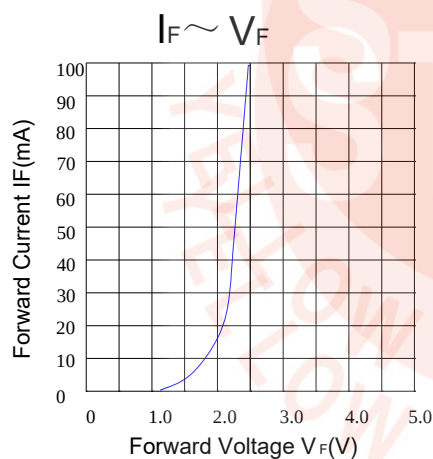
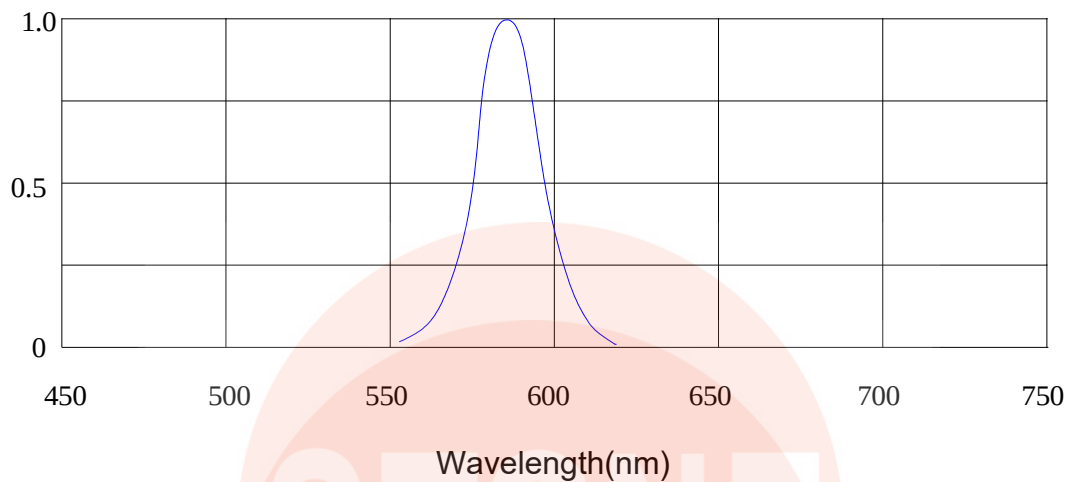
Note:1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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





早安股份有限公司
YELLOW STONE CORP.

Package Flow

