



Seven Segment Display Data Sheet

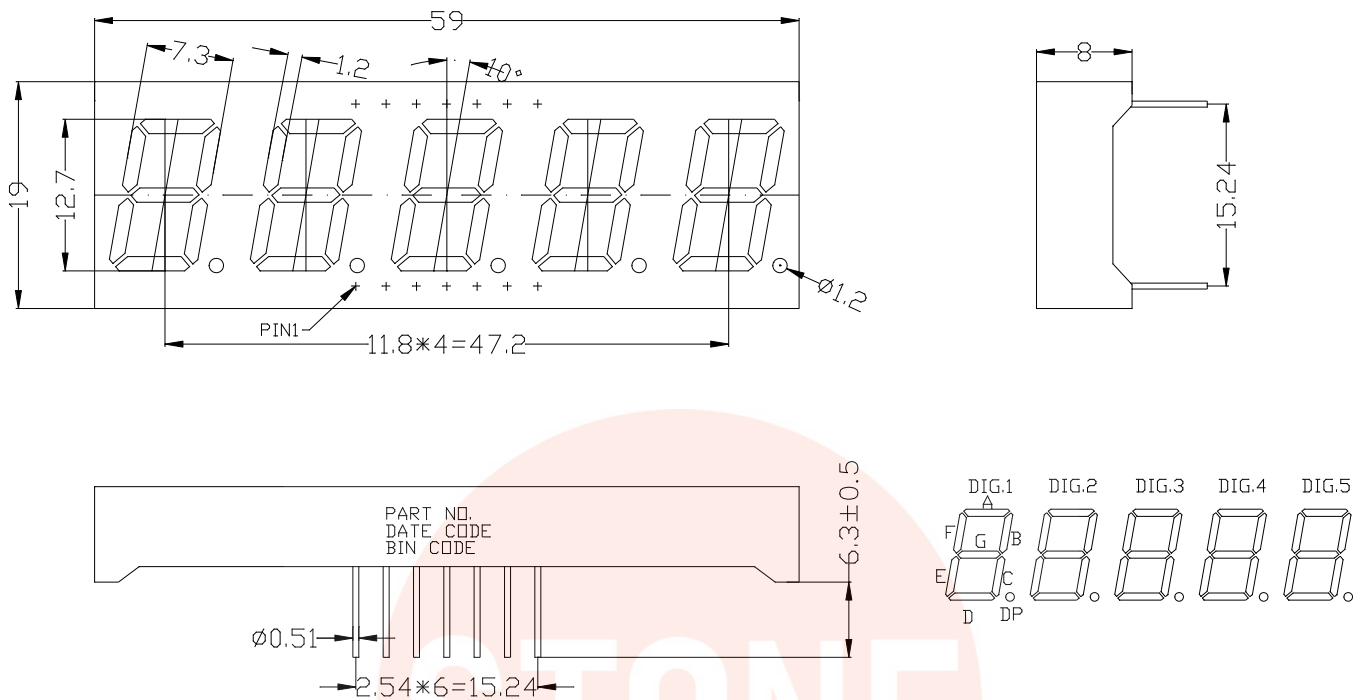
Description

This YDV-5504CR-N is a 0.5 inch (12.7 mm) digit height five digit display .
This device uses AlInGaP Red chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a black face and white segments.

Features

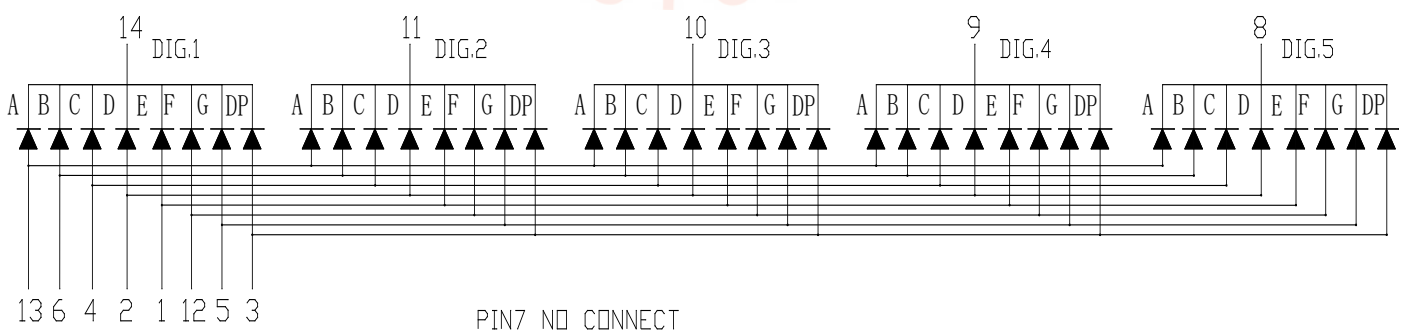
- 0.5 inch (12.7 mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



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

Internal Circuit Diagrams



Absolute Maximum Rating (Ta = 25°C)

Parameter	Max.	Unit
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment	90	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
Luminous Intensity	Iv	8.4	21		mcd	IF=10mA
Peak Emission Wavelength	λ_p		650		nm	IF=20mA
Spectral Line Half-Width	$\Delta\lambda$		20		nm	IF=20mA
Dominant Wavelength	λ_d		639		nm	IF=20mA
Forward Voltage Per Segment	VF		2.1	2.6	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



Luminous Intensity (IF=10mA. Ta=25°C)

Item	Bin	Min.	Max.	Unit
Luminous intensity	H	8.4	11.85	mcd
	I	11.86	16.78	
	J	16.79	22.42	
	K	22.43	30.16	
		30.17	39.84	
		39.85	50	

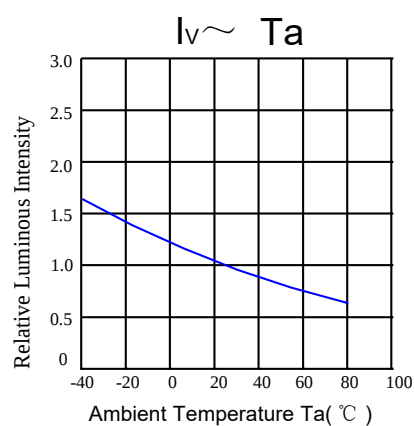
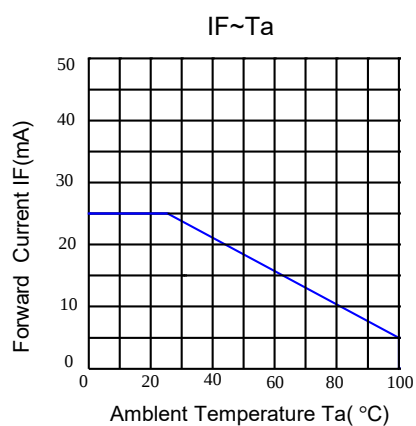
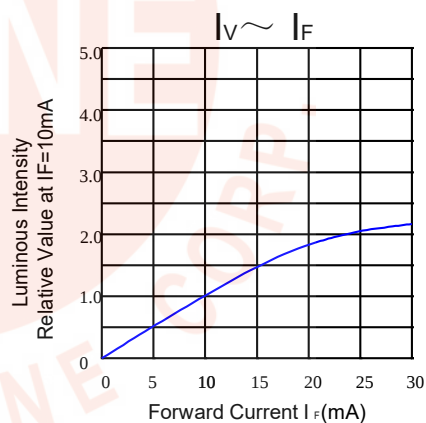
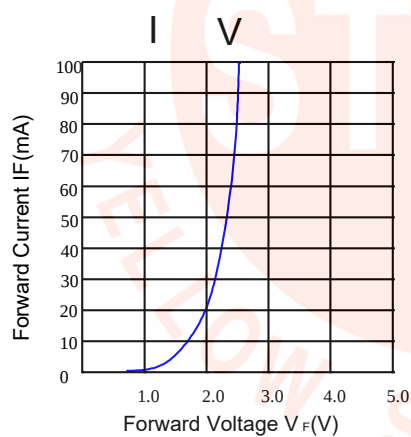
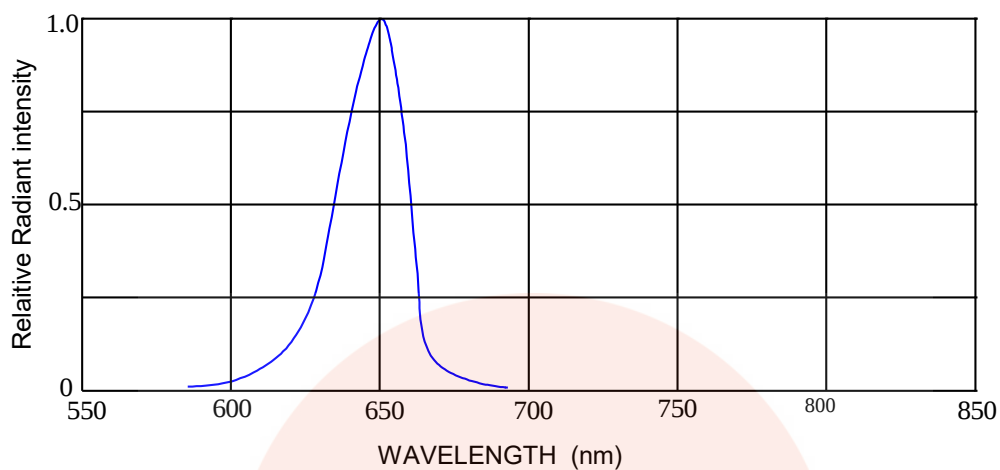
Note: It maintains a tolerance of 15% on IV.



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

