



Seven Segment Display Data Sheet

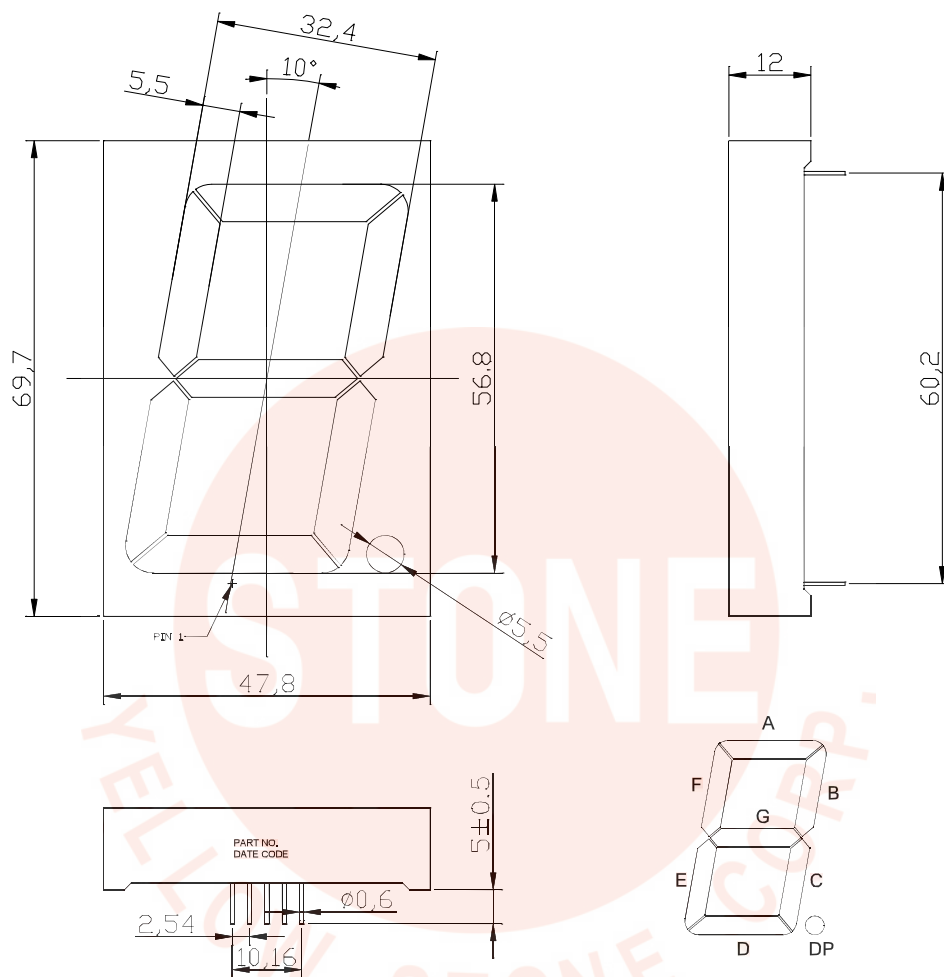
Description

The YDS-23112CR-N is a 2.3 inch (56.8mm) digit height single-digit display. This device uses AlInGaP red LED chips (AlInGaP epi on GaAs substrate), and has a black face and red segments.

Features

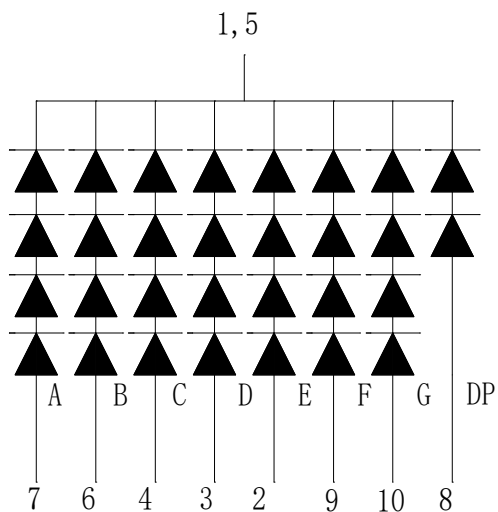
- 2.3 inch (56.8mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



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

Internal Circuit Diagram





ABSOLUTE MAXIMUM RATING AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Continuous Forward Current Per Segment	25	mA
Peak Froward Current (Frequency 1Khz, 15% duty cycle)	90	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 AT TA=25°C

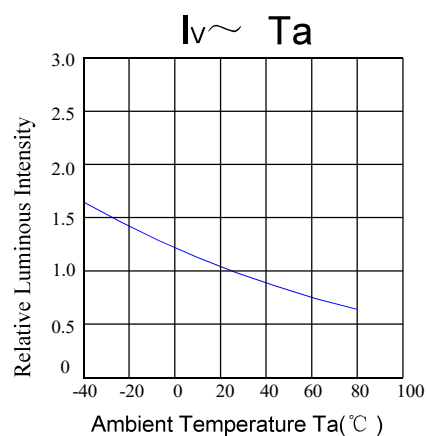
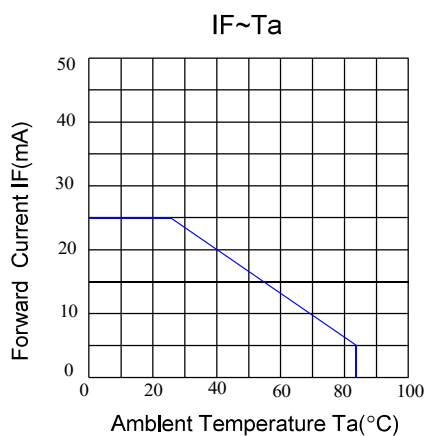
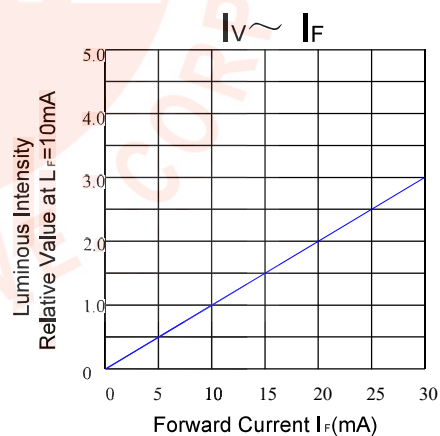
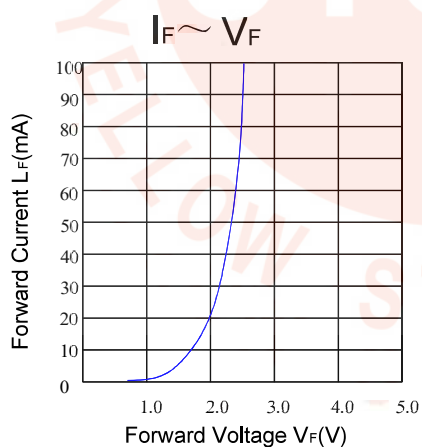
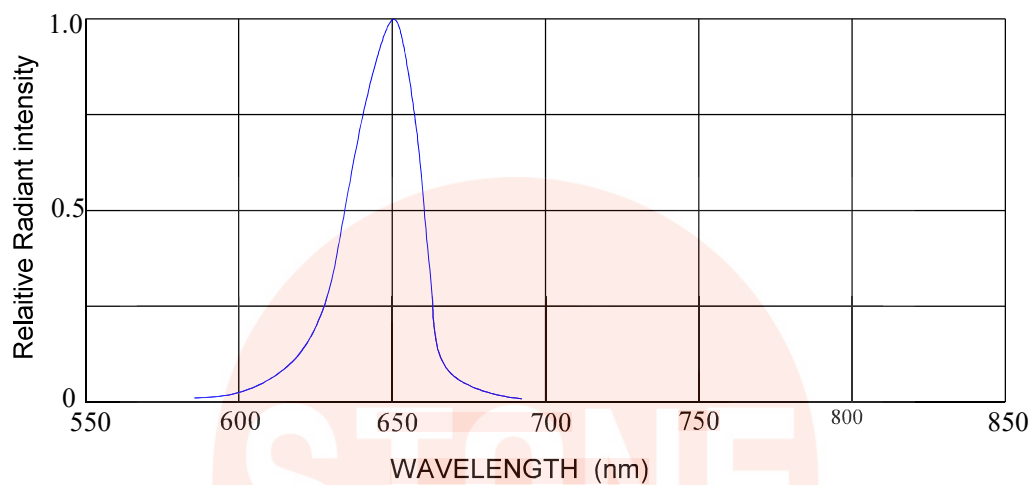
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	13.7	34.7		mcd	I _F =10mA
Peak Emission Wavelength	λ _p		650		nm	I _F =20mA
Spectral Line Half-Width	Δλ		20		nm	I _F =20mA
Dominant Wavelength	λ _d		639		nm	I _F =20mA
Forward Voltage	V _F		8.4	10.4	V	I _F =20mA
	V _F (DP)		4.2	5.2		
Reverse Current Per segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =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.

Packing Flow.

