YDD-32020CR-N

Seven Segment Display Data Sheet

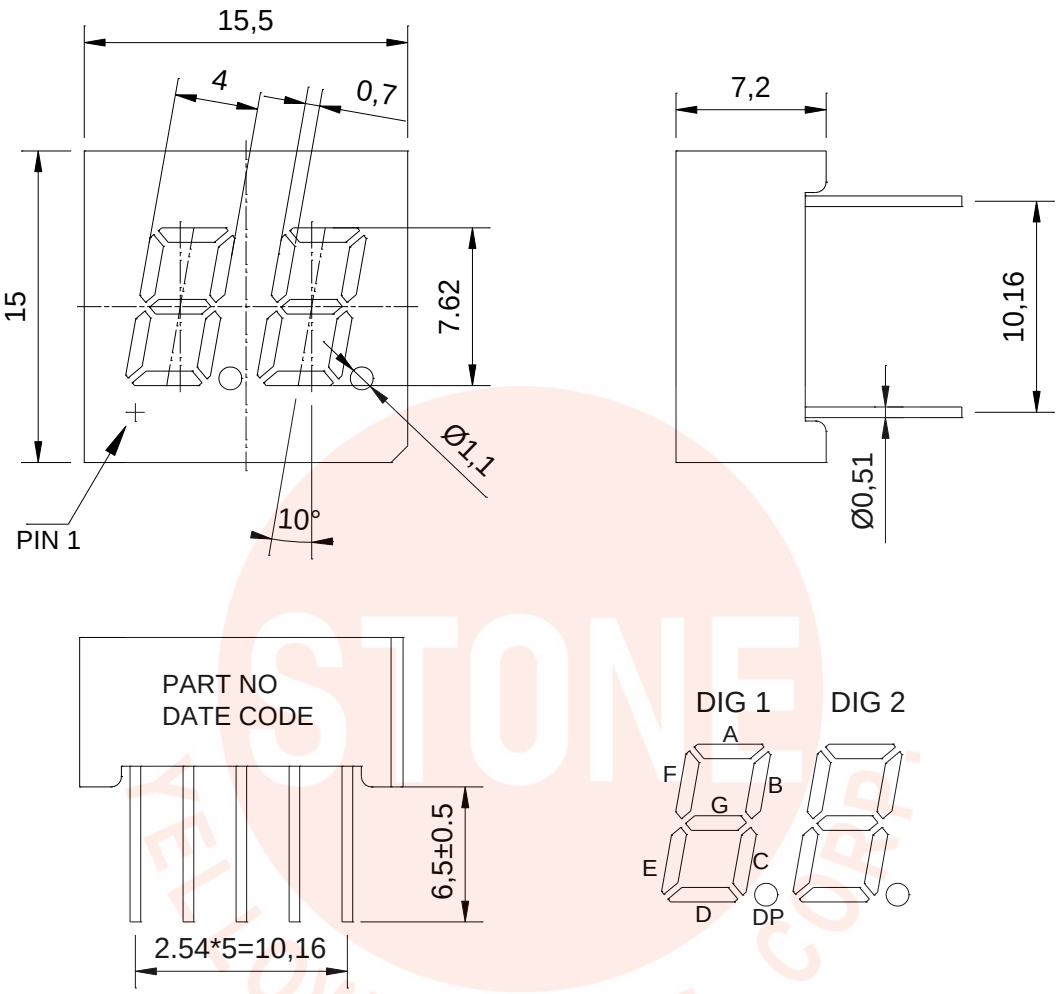
Description

This YDD-32020CR-N is a 0.30 inch (7.62mm) digit height dual digit seven-segment display. This device uses AlInGaP RED LED chips(AlInGaP on a non-transparent substrate).The display has a black face and white segments.

Features

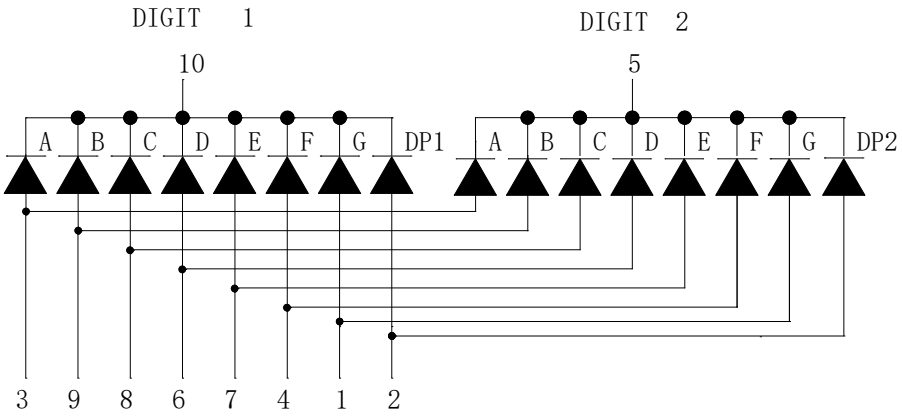
- 0.30-inch (7.62 mm) digit height
- Continuous uniform segments
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

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	Maximum	UNIT
Power Dissipation Per Segment	70	mW
Peak Froward Current	90	mA
Continuous Forward Current Per Segment	25	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-40^0C to $+80^0$C	
Storage Temperature Range	-40^0C to $+80^0$C	
Soldering Conditions:Max 260^0C for max 3sec at 1.6mm below seating plane.		

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.

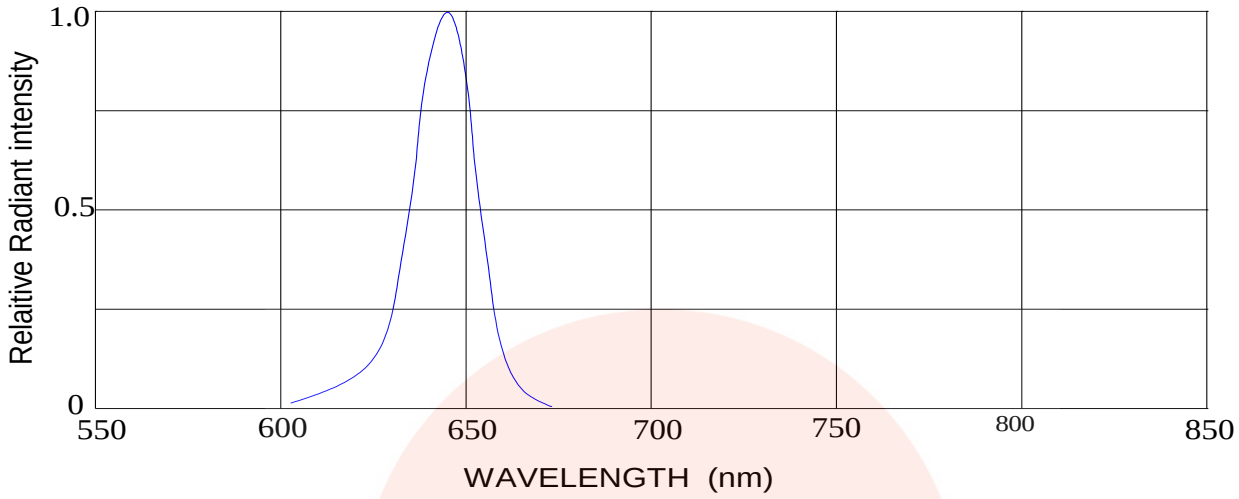
Electrical / Optical Characteristics (Ta = 25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	3.4	5.4		mcd	I_F=10mA
Peak Emission Wavelength	λp		639		nm	I_F=20mA
Spectral Line Half-Width	Δλ		20		nm	I_F=20mA
Dominant Wavelength	λd		631		nm	I_F=20mA
Forward Voltage Per Dot	V_F		2.0	2.6	V	I_F=20mA
Reverse Current Per Dot	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I_F=10mA

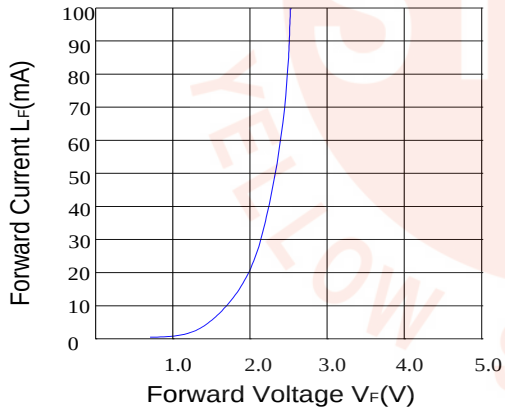
Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

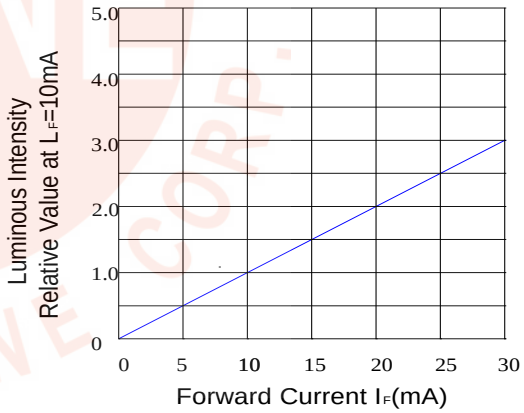
RELATIVE INTENTY VS WAVELENGT H



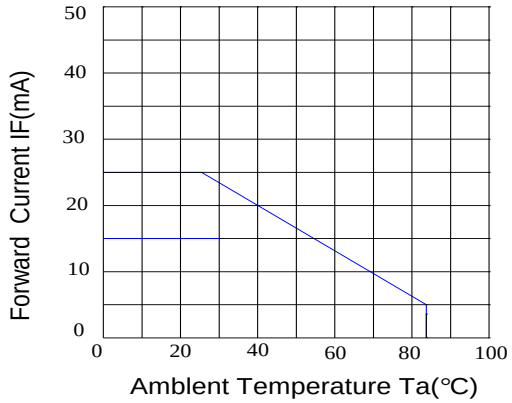
$I_F \sim V_F$



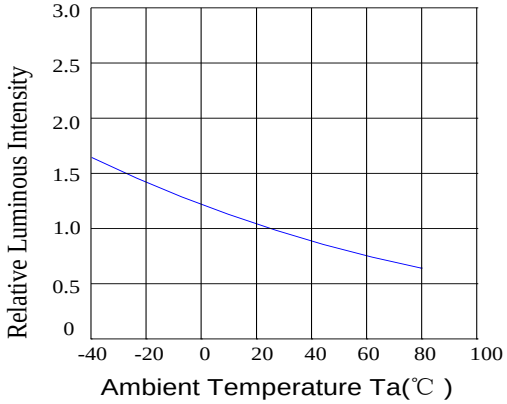
$I_V \sim I_F$



IF~Ta



$I_V \sim$ Ta



Package Flow