YDS-A32VDVK

8.0mm (0.32inch) Orange Red LED Display
Single Digit 7-segment LED Display

Technical Data Sheet

Features

- High reliability
- Low power consumption
- Excellent characters appearance
- Evenly lighted segments
- Wide viewing angle
- Easy mounting on PCB or sockets
- I.C. compatible
- RoHS compliant

Descriptions

- The YDS-A32VDVK is a 8.0mm (0.32inch) digit height seven-segment LED display.
- The display provides excellent reliability in bright ambient light.
- The device is available as either common anode or common cathode.
- The device is made with red diffused segments and black surface.

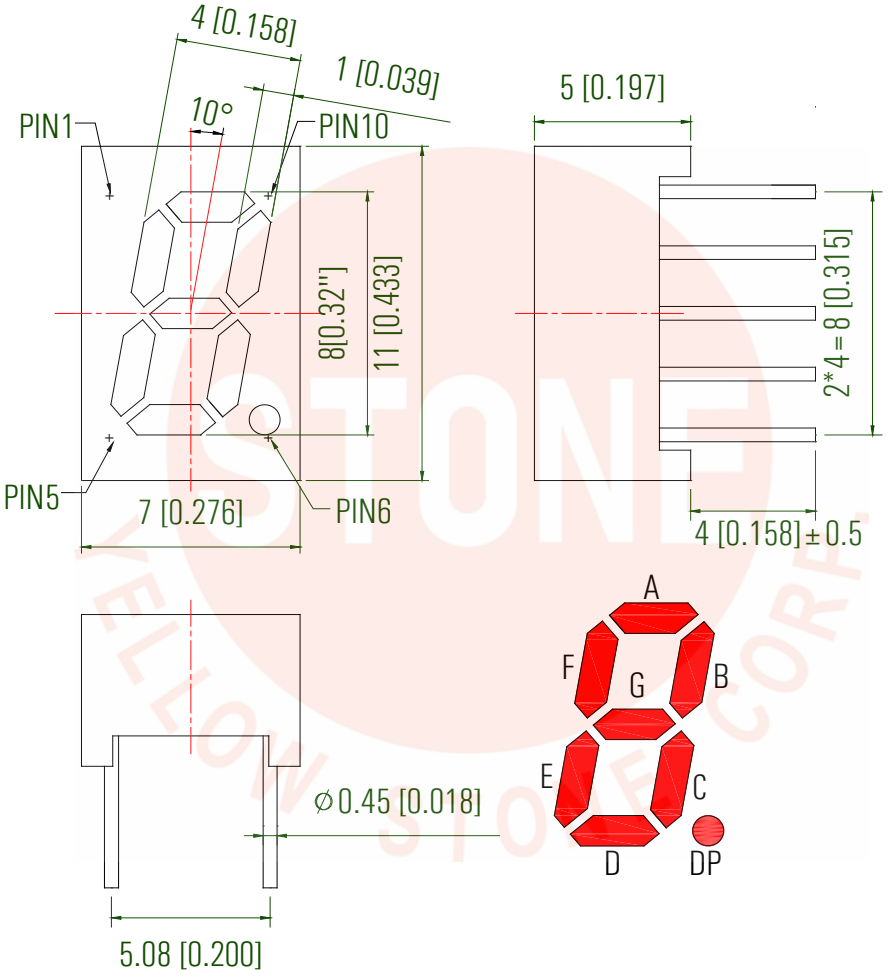
Applications

- Home and smart appliances
- Instrument panels
- Display time and digital combination
- Test and measurement equipment
- Control units

Device Selection Guide

Part No.	Emitting Color	Circuit Common
YDS-A32VDVK	Orange red	Common Anode

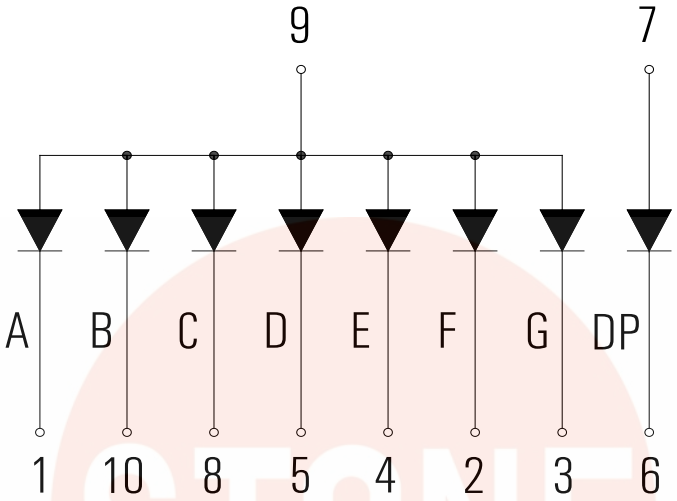
Package Dimension



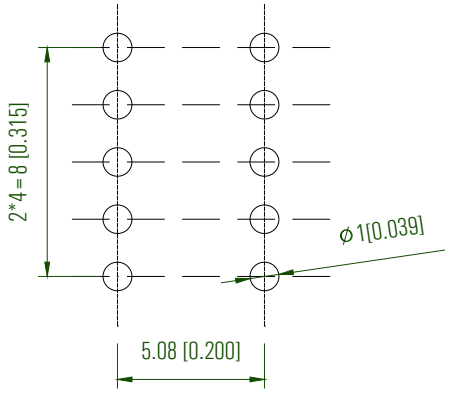
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (.010”) unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Internal Circuit Diagram



Recommended PCB Layout



Absolute Maximum Ratings at T_A=25℃

Parameters	Symbol	Max	Unit
Power Dissipation (Per Chip)	P_D	48	mW
Peak Forward Current (Per Segment) (1/10 Duty Cycle, 0.1ms Pulse Width)	I_{FP}	40	mA
Forward Current (Per Segment)	I_F	20	mA
Reverse Voltage (Per Chip)	V_R	5	V
Operating Temperature Range	T_{opr}	-40℃ to +80℃	
Storage Temperature Range	T_{stg}	-40℃ to +85℃	
Soldering Temperature	T_{sld}	260℃ for 5 Seconds	

Electrical Optical Characteristics at T_A=25℃

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	10.0	20.0	---	mcd	IF=5mA (Note a)
		20.0	45.0	---	mcd	IF=10mA (Note a)
Luminous Intensity Matching Ratio	I_{v-m}	---	---	2:1		IF=20mA
Peak Emission Wavelength	λp	---	632	---	nm	IF=20mA
Dominant Wavelength	λd	---	624	---	nm	IF=20mA (Note b)
Spectral Line Half-Width	△λ	---	20	---	nm	IF=20mA
Forward Voltage (Per Segment)	V_F	---	2.0	2.4	V	IF=20mA (Note c)
Reverse Current (Per Segment)	I_R	---	---	50	μA	VR=5V

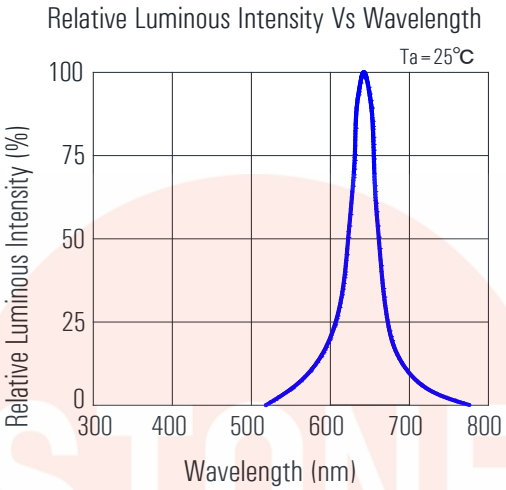
Notes:

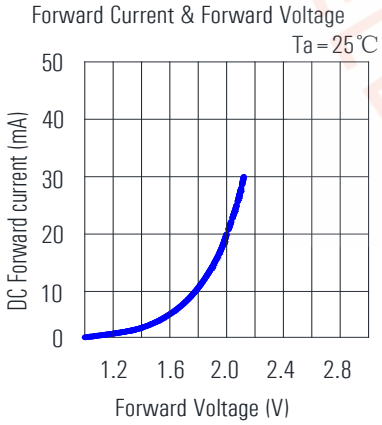
a. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tolerance of Luminous Intensity: ± 10%.

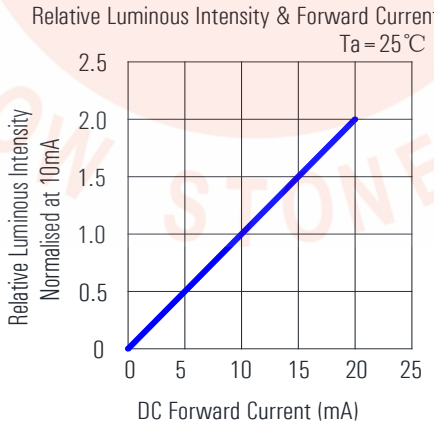
b. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

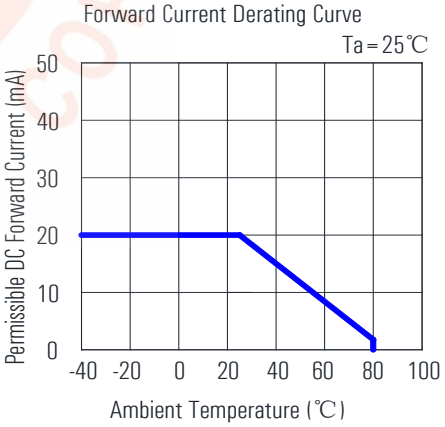
c. Tolerance of Forward Voltage: ± 0.1V.

Typical Electrical/Optical Characteristic Curves at T_A = 25°C

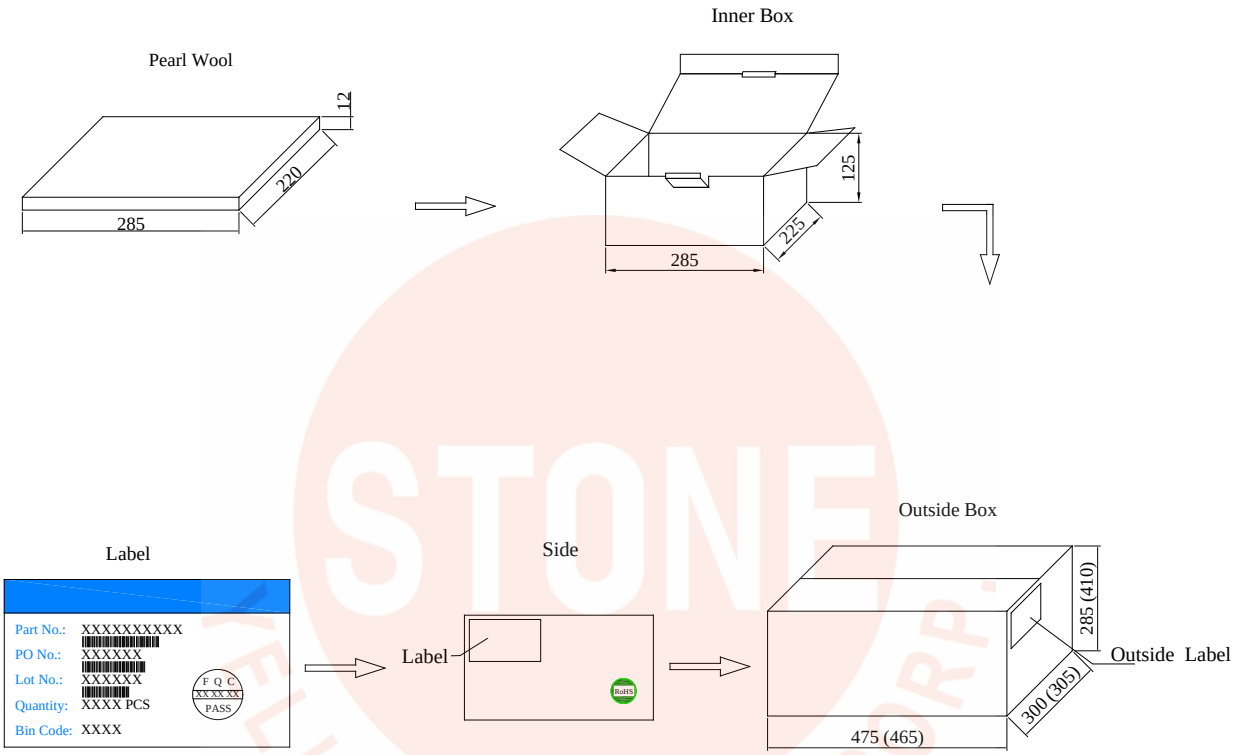








Packing & Label Specifications



Notes:

1. The above "Packing & Label Specifications" refer to bag packaging and are for reference only.
2. Bag packaging will be used for through-hole LED digital displays with character heights exceeding 0.8 inches.
3. Through-hole LED digital displays offer three packaging options: tube, bag, and box. If customers have special packaging requirements, please confirm the required packaging method with the salesperson in advance when placing an order.