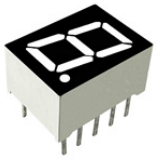
YDS-A40BBWK

10.16mm (0.4inch) **Blue** 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-A40BBWK is a 10.16mm (0.4inch) blue through-hole single digit LED display. It features white diffused segments and a black surface. This display is designed for indoor use and is suitable for a wide variety of applications, including electronic signs, industrial equipment, and consumer electronics. Also known as 10.16mm (0.4inch) blue through-hole single digit LED numeric displays.

This 10.16mm (0.4inch) through-hole seven segment LED display features industry standard package dimensions and pinout. The device is available in common anode or common cathode configurations. Color options include red, green, blue, orange and more.

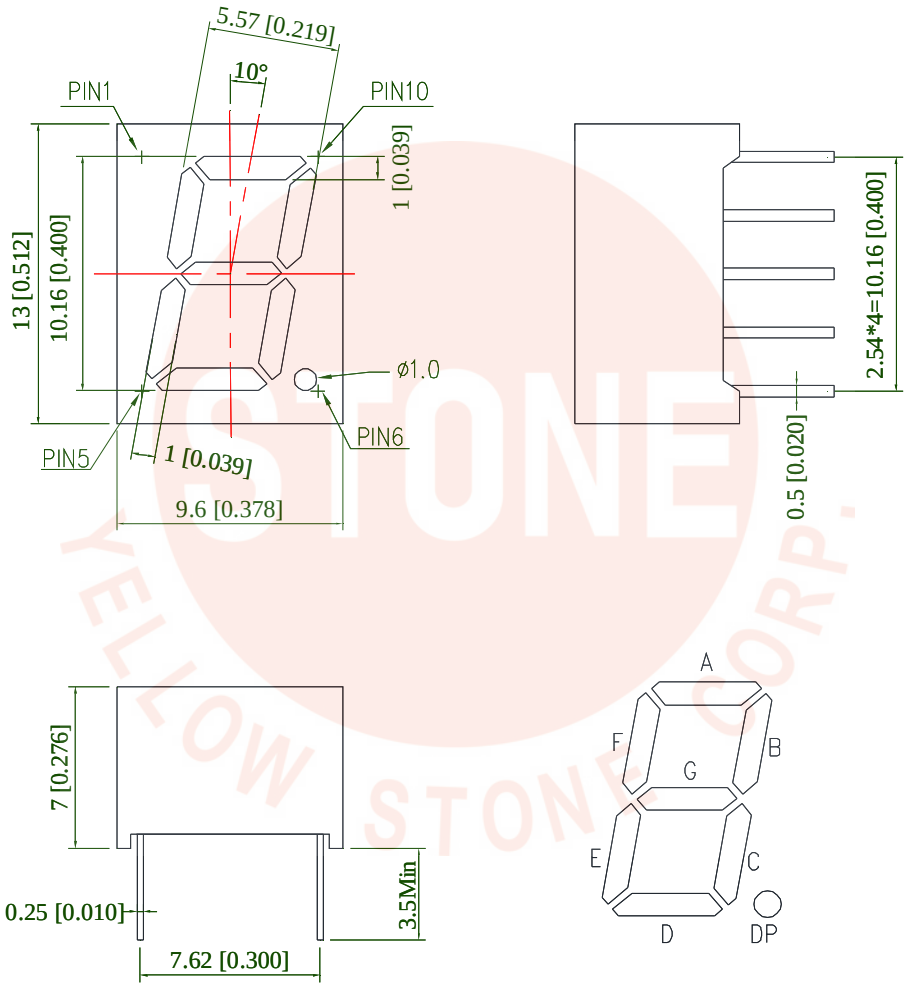
Applications

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

Device Selection GuideG

Part No.	Emitting Color	Circuit Common
YDS-A40BBWK	Blue	Common Anode

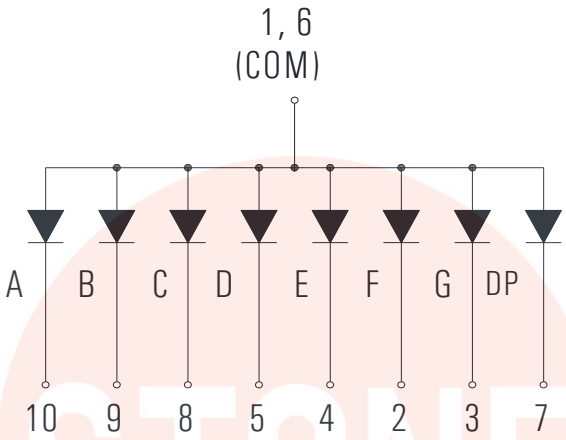
Package Dimension



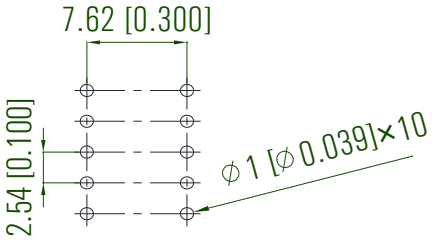
Notes:

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	P_D	256	mW
Power Dissipation (Per Chip)	P_D	32	mW
Peak Forward Current (Per Segment) (1/10 Duty Cycle, 0.1ms Pulse Width)	I_{FP}	20	mA
Forward Current (Per Segment)	I_F	10	mA
Reverse Voltage (Per Chip)	V_R	5	V
Operating Temperature Range	T_{opr}	-40°C to +80°C	
Storage Temperature Range	T_{stg}	-40°C to +85°C	
Soldering Temperature	T_{sld}	260°C for 5 Seconds	

Electrical Optical Characteristics at T_A=25℃

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	14.5	29	---	mcd	IF=5mA (Note a)
		29	58	---	mcd	IF=10mA (Note a)
Luminous Intensity Matching Ratio	I_{v-m}	---	---	2:1		IF=10mA
Peak Emission Wavelength	λp	---	468	---	nm	IF=10mA
Dominant Wavelength	λd	---	470	---	nm	IF=10mA (Note b)
Spectral Line Half-Width	Δλ	---	20	---	nm	IF=10mA
Forward Voltage (Per Segment)	V_F	---	2.8	3.2	V	IF=10mA (Note c)
Reverse Current (Per Segment)	I_R	---	---	50	μA	VR=5V

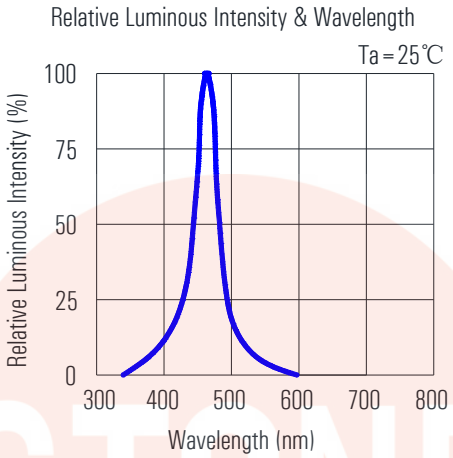
Notes:

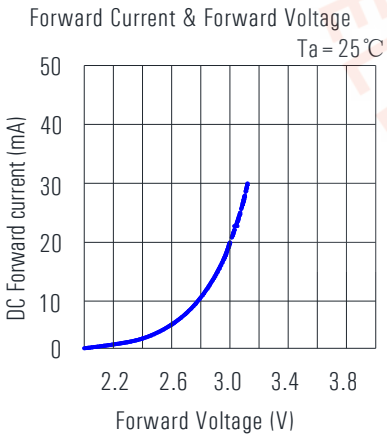
a. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tolerance of Luminous Intensity: ± 10%.

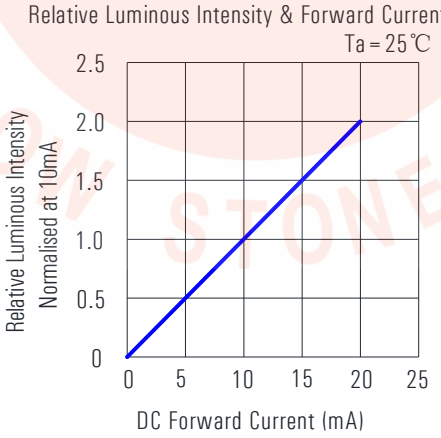
b. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

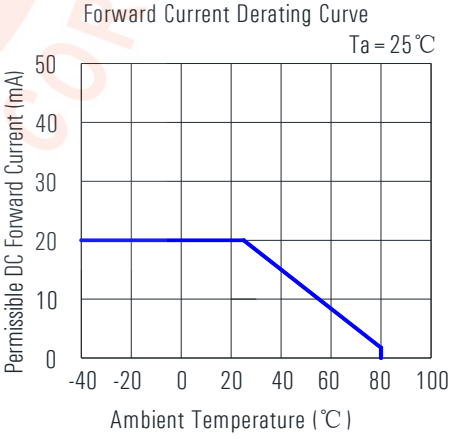
c. Tolerance of Forward Voltage: ± 0.1V.

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

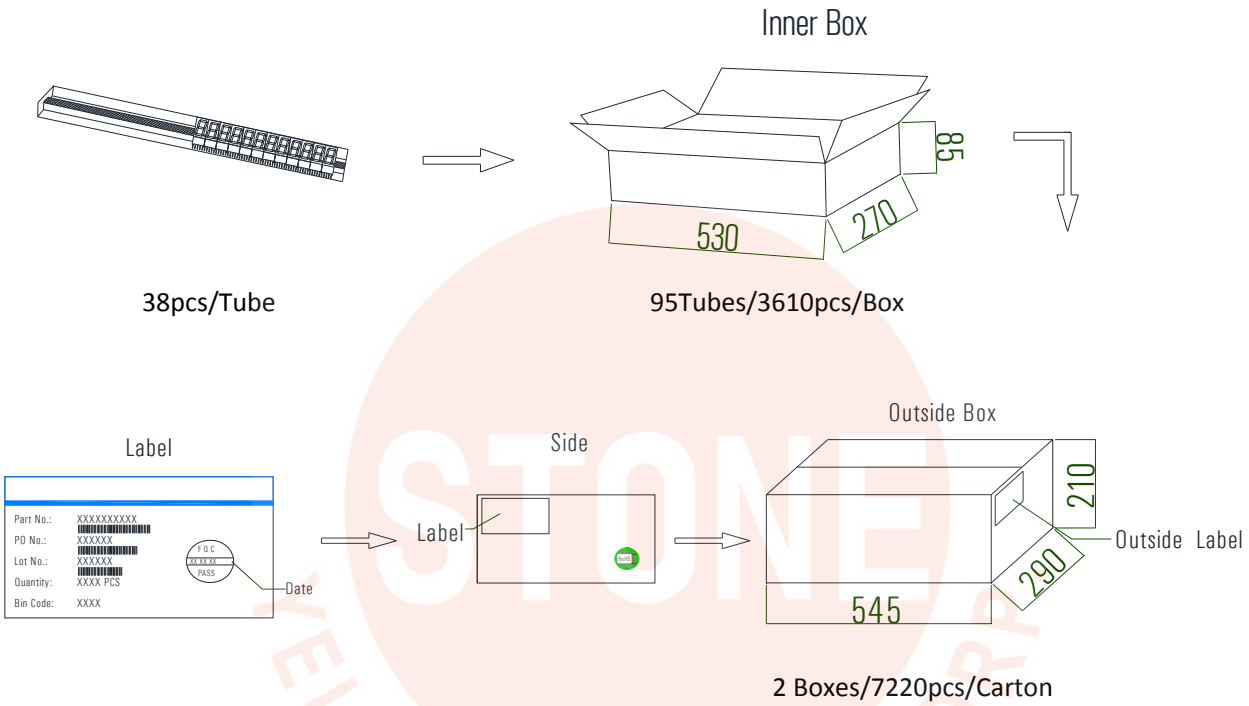








Packing & Label Specifications



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.