

YDQ-A80WBWK/YDQ-C80WBWK

0.80 inch (20.40mm), White Quadruple
Digit 7-segment LED Display

Technical Data Sheet

Features:

- 0.80" (inch) digit height
- Low power consumption
- High reliability
- Excellent characters appearance
- Available in common cathode or common anode
- RoHS Compliant



Descriptions:

- The YDQ-C80WBWK is a 0.80 inch (20.40mm) height Quadruple digit display.
- The display provides excellent reliability in bright ambient light.
- The device is made with white segments and black surface.

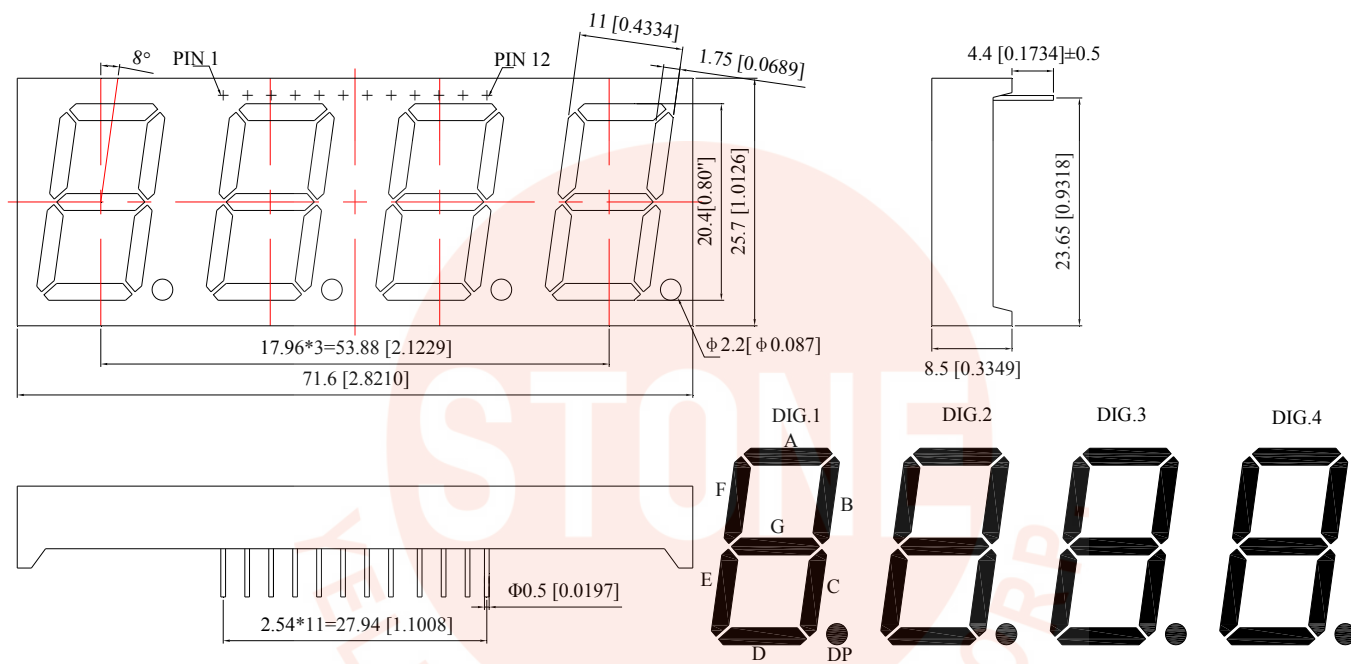
Applications:

- Home appliances
- Instrument panels
- Digital readout displays
- Game console systems

Device Selection Guide:

Part No.	Emitting Color	Polarity
YDQ-A80WBWK	White	Common Anode
YDQ-C80WBWK	White	Common Cathode

Package Dimension:



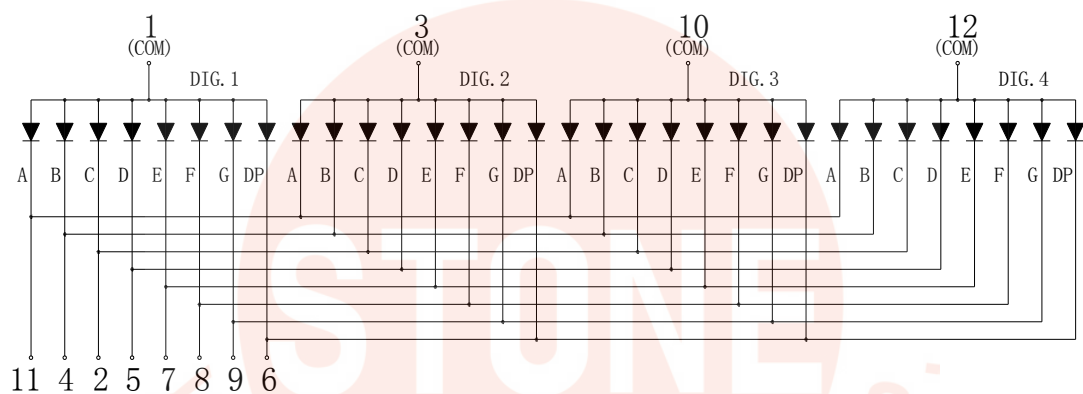
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (.010") unless otherwise noted.

Internal Circuit Diagram:

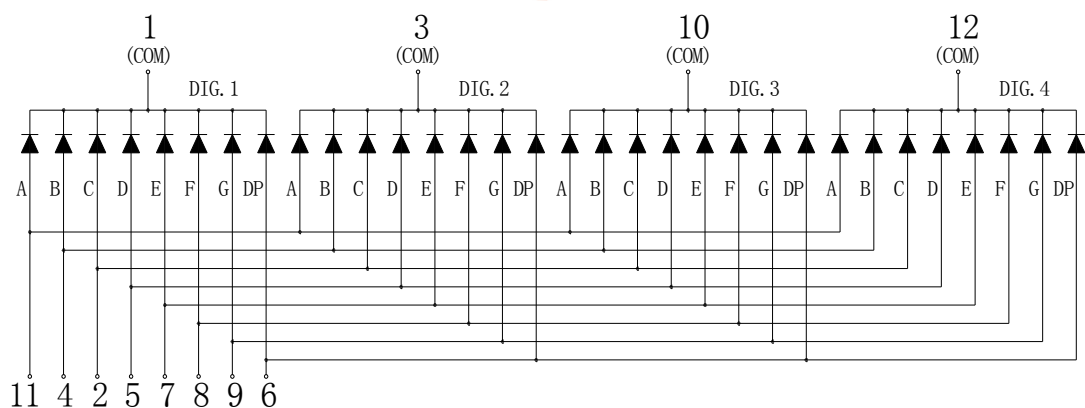
Internal Circuit Diagram (Common Anode)

YDQ-A80WBWK



Internal Circuit Diagram (Common Cathode)

YDQ-C80WBWK



Absolute Maximum Ratings at Ta=25°C

Parameters	Symbol	Max	Unit
Power Dissipation Per Segment	P _d	35	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	I _{FP}	50	mA
Forward Current Per Segment	I _F	10	mA
Reverse Voltage Per Segment	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 _{slid}	260°C for 5 Seconds	

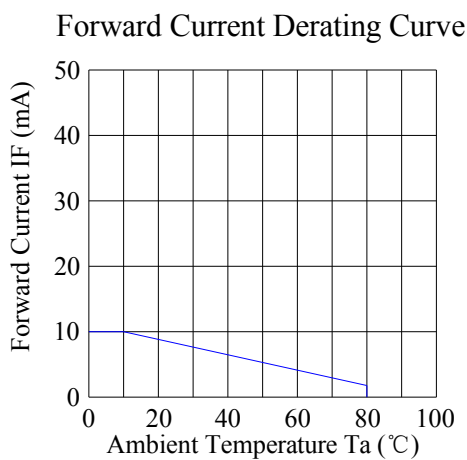
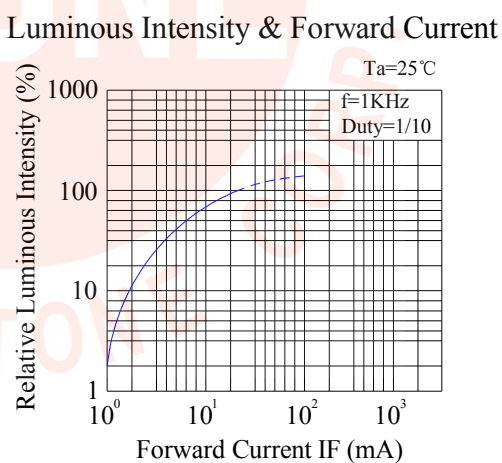
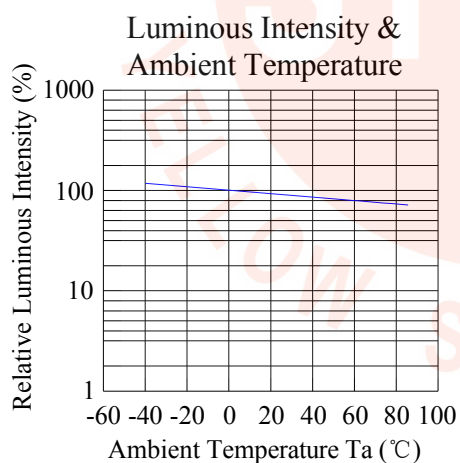
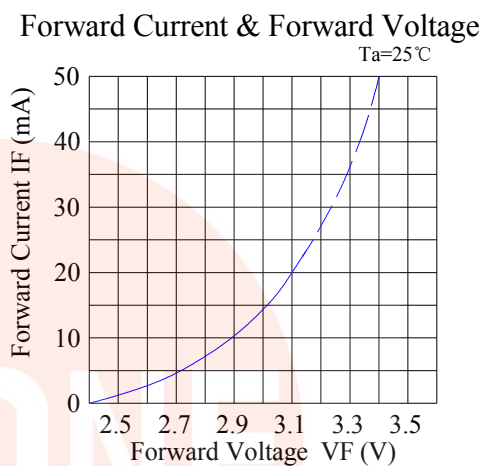
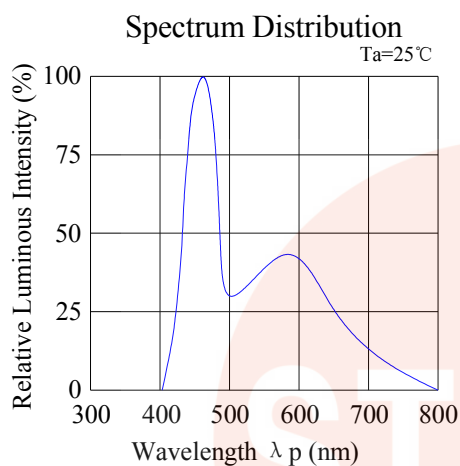
Electrical Optical Characteristics at Ta=25°C

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	I _v	70	135	---	mcd	IF=10mA (Note 1, 2)
Luminous Intensity Matching Ratio	I _{v-m}	---	---	2:1		IF=10mA
Chromaticity Coordinates	x	---	0.30	---		IF=10mA (Note 3)
	y	---	0.31	---		
Forward Voltage Per Segment	V _F	---	2.90	3.10	V	IF=10mA
Reverse Current Per Segment	I _R	---	---	50	μA	VR=5V

Notes:

1. Luminous Intensity is a average value which is measured one 7-segment. Tolerance of Luminous Intensity: ±10%.
2. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.
3. The chromaticity coordinates (x, y) is derived from the 1931 CIE chromaticity diagram.

Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

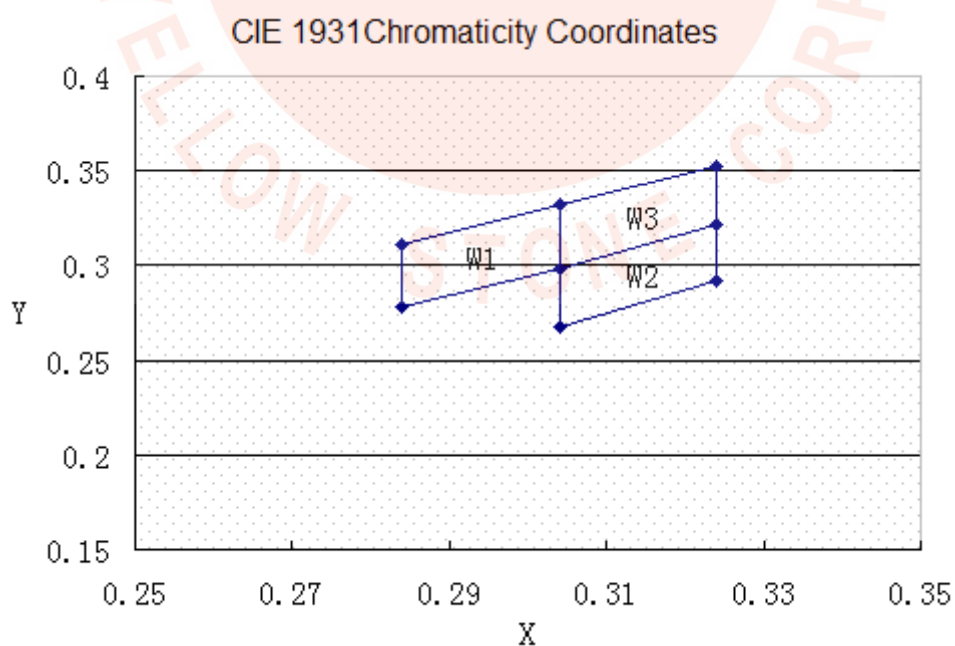


Chromaticity Coordinates Specifications for Bin Rank

Color Bin at IF = 10mA

Bin Code	CIE 1931 Chromaticity Coordinates				
W1	x	0.284	0.284	0.304	0.304
	y	0.278	0.311	0.332	0.298
W2	x	0.304	0.304	0.324	0.324
	y	0.268	0.298	0.322	0.292
W3	x	0.304	0.304	0.324	0.324
	y	0.298	0.332	0.352	0.322

Tolerance on each Hue (x, y) bin is +/- 0.01.



Packing & Label Specifications:

