

### FEATURES

- High intensity and reliability.
- High quality and low cost.
- Choice of colors : Red/Orange/Green/Blue, etc.
- Low power requirement.
- I. C. compatible.
- Easy assembly.

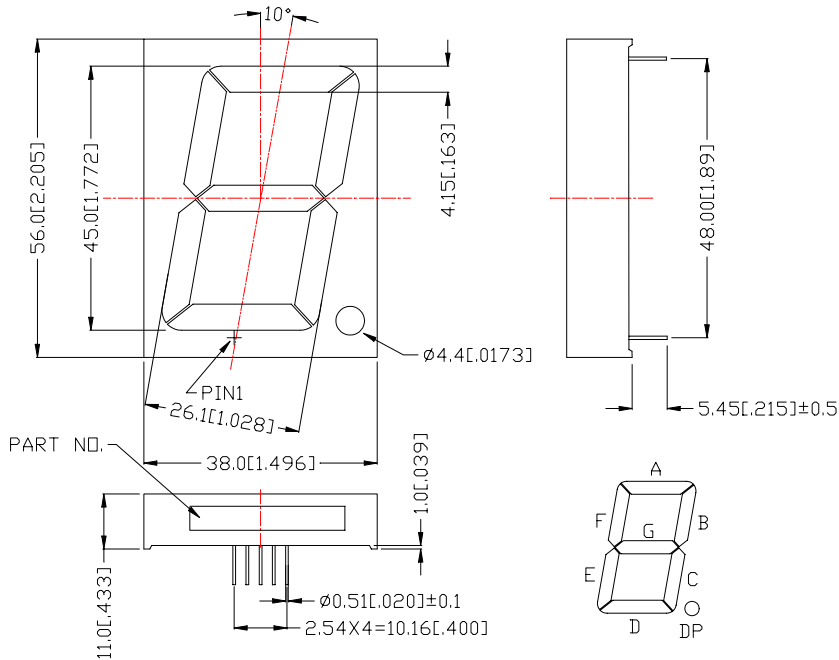
### DESCRIPTION

The WCN1-XXA8XX-XXS series are 1.8inch (44.8mm) height single digit displays.

SH. Red displays have black face or gray face and milky segment or red segment.

Bright Green displays have black face or gray face and milky segment.

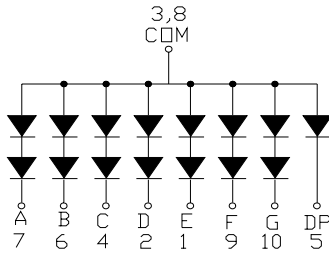
### PACKAGE DIMENSIONS



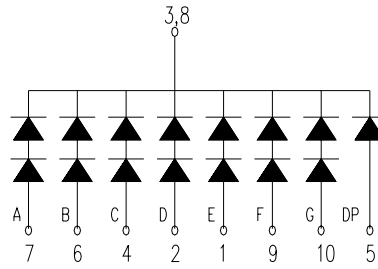
NOTES: All dimensions are in millimeters (inches) tolerance are ± 0.25mm(0.01) unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM

A. WCN1-XXA8XX-A2XS



B. WCN1-XXA8XX-C2XS



## ABSOLUTE MAXIMUM RATINGS AT $T_a=25^\circ\text{C}$

PARAMETER	SH.RED	BRIGHT GREEN	UNIT
Power Dissipation Per Segment	100	130	mW
Peak Forward Current Per Segment (1/10 duty cycle 0.1ms pulse width)	100	100	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	25 0.30	25 0.33	mA mA/°C
Reverse Voltage Per Segment	10	10	V
Operating Temperature Range	-35°C to + 85°C		
Storage Temperature Range	-35°C to + 85°C		
Solder Temperature 1/16 inch below seating plane for 3 seconds at 260°C			

## ELECTRICAL/OPTICAL CHARACTERISTICS AT $T_a=25^\circ\text{C}$

WCN1-00A8SD-A21S/C21S

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Luminous Intensity Per Segment	$I_V$	18.0	22.0	—	mcd	$I_F=10\text{mA}$
Dominant Wavelength	$\lambda_D$	—	643	—	nm	$I_F=20\text{mA}$
Peak Emission Wavelength	$\lambda_P$	—	660	—	nm	$I_F=20\text{mA}$
Spectral Line Half-Width	$\Delta\lambda$	—	20	—	nm	$I_F=20\text{mA}$
Forward Voltage Per Segment	$V_F$	—	3.6	4.0	V	$I_F=20\text{mA}$
Reverse Current Per Segment	$I_R$	—	—	100	$\mu\text{A}$	$V_R=15\text{V}$
Luminous Intensity Matching Ratio (Segment To Segment)	$I_{V-m}$			2:1		$I_F=10\text{mA}$

**ELECTRICAL/OPTICAL CHARACTERISTICS AT T<sub>a</sub>=25°C****WCN1-00A8G3-A21S/C21S**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Luminous Intensity Per Segment	I <sub>V</sub>	12.0	16.0	—	mcd	I <sub>F</sub> =10mA
Dominant Wavelength	λ <sub>D</sub>	—	573	—	nm	I <sub>F</sub> =20mA
Peak Emission Wavelength	λ <sub>P</sub>	—	568	—	nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ	—	30	—	nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>	—	4.5	5.2	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>	—	—	100	μA	V <sub>R</sub> =10V
Luminous Intensity Matching Ratio (Segment To Segment)	I <sub>V-m</sub>			2:1		I <sub>F</sub> =10mA