



WCN1-XX39XX-XXX

WCN3-XX39XX-XXX

WCN4-XX39XX-XXX

SERIES

0.39"SEVEN-SEGMENT NUMERIC LED DISPLAYS

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-XX39XX-XXX , WCN3-XX39XX-XXX and WCN4-XX39XX-XXX series are 0.39 inch (10.0mm) height single, triad and quad digit displays.

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

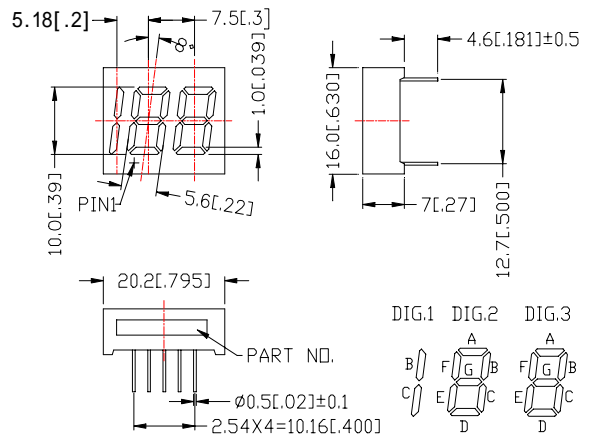
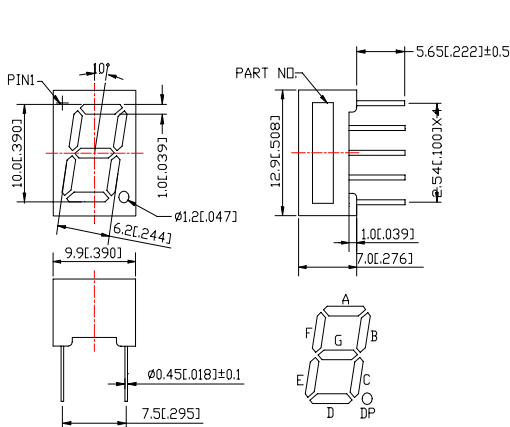
Orange displays have black face or gray face and milky segment or red segment.

Yellow Green displays have black face or gray face and milky segment or green segment

PACKAGE DIMENSIONS

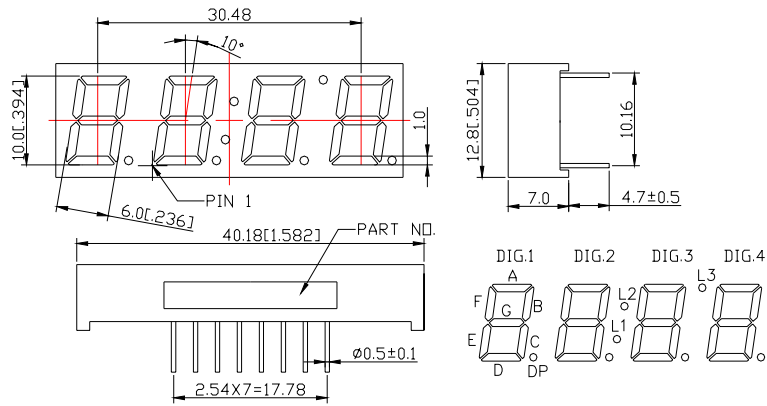
A. WCN1-XX39XX-A1X/C1X/A2X/C2X

B. WCN3-XX39XX-A1X/C1XA

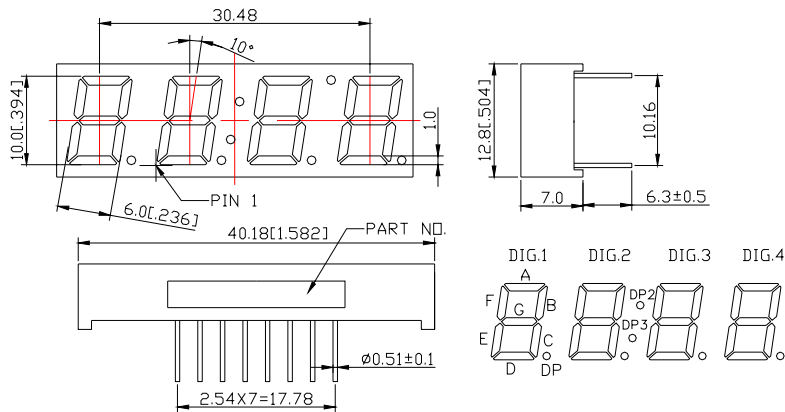


PACKAGE DIMENSIONS

C. WCN4-XX39XX-A32/C32



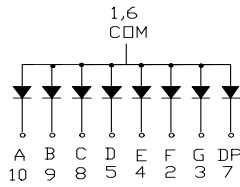
D. WCN4-XX39XX-A62/C62



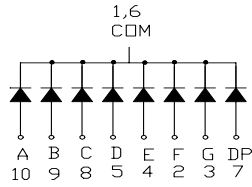
NOTES: All dimensions are in millimeters (inches) tolerance are $\pm 0.25\text{mm}(0.010)$ unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM

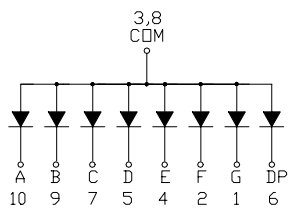
A. WCN1-XX39XX-A1X



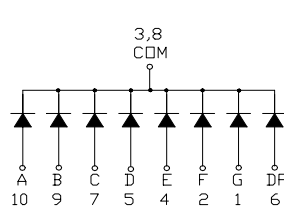
B. WCN1-XX39XX-C1 X



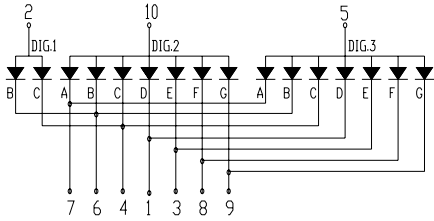
C. WCN1-XX39XX-A2X



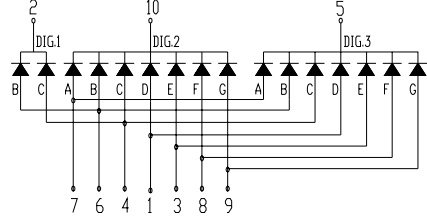
D. WCN1-XX39XX-C2X



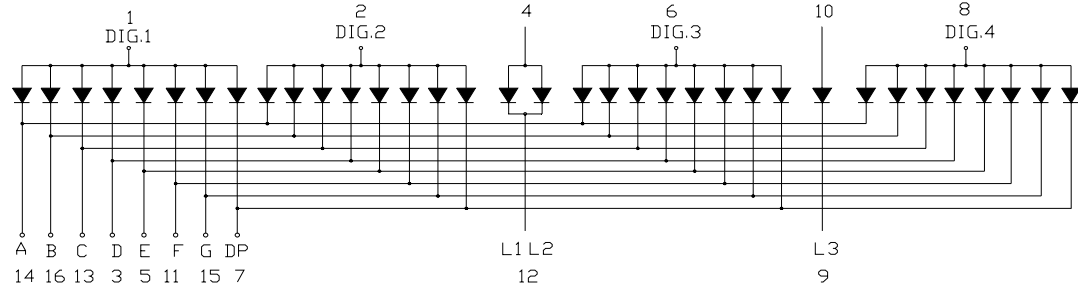
E. WCN3-XX39XX-A1XA



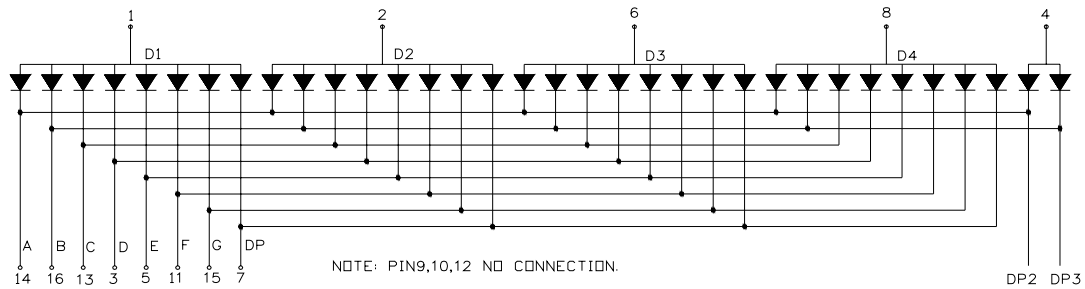
F. WCN3-XX39XX-C1XA



G. WCN4-XX39XX-A32



H. WCN4-XX39XX-A62



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

| PARAMETER | SH.RED | ORANGE | Yellow GREEN | UNIT |
|---|-----------------|--------|--------------|-------|
| Power Dissipation Per Segment | 50 | 65 | 65 | mW |
| Peak Forward Current Per Segment (1/10duty cycle 0.1ms pulse width) | 100 | 100 | 100 | mA |
| Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment | 25 | 25 | 25 | mA |
| Reverse Voltage Per Segment | 0.30 | 0.20 | 0.33 | mA/°C |
| Operating Temperature Range | 5 | 5 | 5 | V |
| Storage Temperature Range | -35°C to + 85°C | | | |
| Solder Temperature 1/16 inch below seating plane for 3 seconds at 260°C | -35°C to + 85°C | | | |

ELECTRICAL/OPTICAL CHARACTERISTICS AT T_a=25°C

WCN1-0039SR-A11/C11/A21/C21;WCN3-0039SR-A11A/C11A;WCN4-0039SR-A32/C32/A62/C62

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|---|------------------|------|------|------|------|----------------------|
| Luminous Intensity Per Segment | I _V | 2.0 | 3.5 | — | mcd | I _F =10mA |
| Dominant Wavelength | λ _D | — | 643 | — | nm | I _F =20mA |
| Peak Emission Wavelength | λ _P | — | 660 | — | nm | I _F =20mA |
| Spectral Line Half-Width | Δλ | — | 20 | — | nm | I _F =20mA |
| Forward Voltage Per Segment | V _F | — | 1.8 | 2.0 | V | I _F =20mA |
| Reverse Current Per Segment | I _R | — | — | 100 | μ A | V _R =5V |
| Luminous Intensity Matching Ratio (Segment To Segment) | I _{V-m} | | | 2:1 | | I _F =10mA |

WCN1-0039HO-A11/C11/A21/C21;WCN3-0039HO-A11A/C11A;WCN4-0039HO-A32/C32/A62/C62

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|---|------------------|------|------|------|------|----------------------|
| Luminous Intensity Per Segment | I _V | 0.8 | 1.5 | — | mcd | I _F =10mA |
| Dominant Wavelength | λ _D | — | 622 | — | nm | I _F =20mA |
| Peak Emission Wavelength | λ _P | — | 632 | — | nm | I _F =20mA |
| Spectral Line Half-Width | Δλ | — | 35 | — | nm | I _F =20mA |
| Forward Voltage Per Segment | V _F | — | 2.05 | 2.6 | V | I _F =20mA |
| Reverse Current Per Segment | I _R | — | — | 100 | μ A | V _R =5V |
| Luminous Intensity Matching Ratio (Segment To Segment) | I _{V-m} | | | 2:1 | | I _F =10mA |

WCN1-0039GU-A11/C11/A21/C21;WCN3-0039GU-A11A/C11A;WCN4-0039GU-A32/C32/A62/C62

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|---|------------------|------|------|------|------|----------------------|
| Luminous Intensity Per Segment | I _V | 1.0 | 2.5 | — | mcd | I _F =10mA |
| Dominant Wavelength | λ _D | — | 573 | — | nm | I _F =20mA |
| Peak Emission Wavelength | λ _P | — | 568 | — | nm | I _F =20mA |
| Spectral Line Half-Width | Δλ | — | 30 | — | nm | I _F =20mA |
| Forward Voltage Per Segment | V _F | — | 2.25 | 2.6 | V | I _F =20mA |
| Reverse Current Per Segment | I _R | — | — | 100 | μ A | V _R =5V |
| Luminous Intensity Matching Ratio (Segment To Segment) | I _{V-m} | | | 2:1 | | I _F =10mA |