

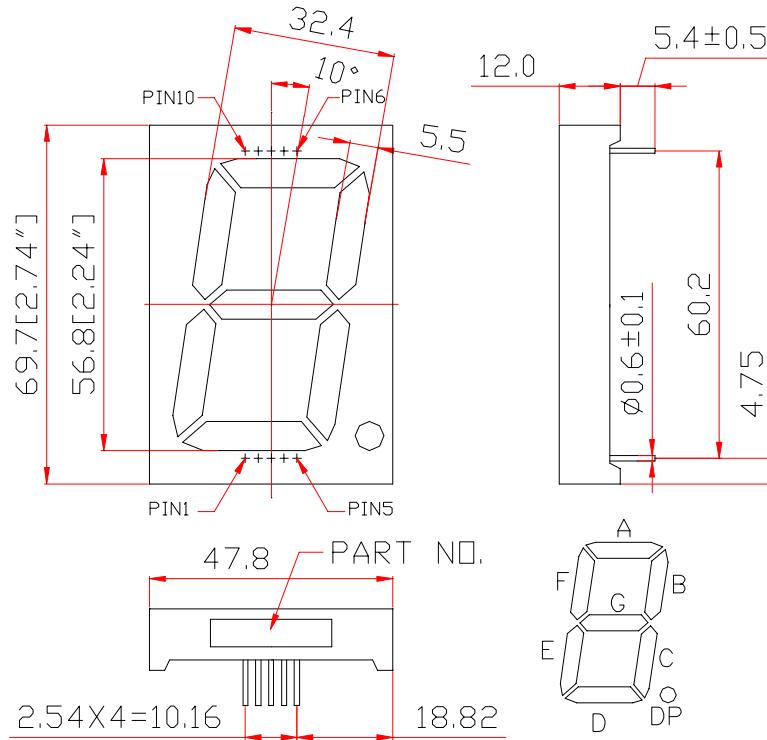
WCN1-00B2WW-C11S

SPECIFICATION

| WCN | | | CUSTOMER Confirmed |
|---------------------------------|-------------------|--------------------|-------------------------------|
| Prepared by | Checked by | Approved by | |
| Fei 2016-06-11 | Athena | | |
| REVISION RECORD | | | |

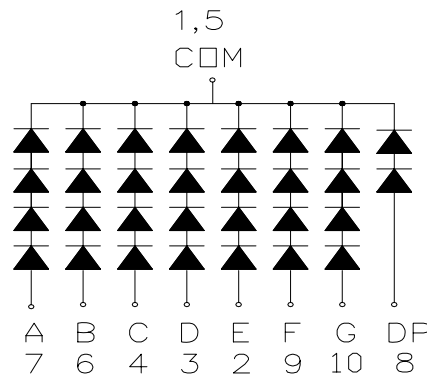
**REVISION: A0**

Outer Dimension:



Notes: Unless otherwise stated, The tolerance is $\pm 0.25\text{mm}$.

Circuit Diagram:



Pin Connection:

| PIN NO. | CONNECTION | PIN NO. | CONNECTION |
|---------|----------------|---------|------------|
| 1 | Common Cathode | 6 | Anode B |
| 2 | Cathode E | 7 | Anode A |
| 3 | Cathode D | 8 | Anode DP |
| 4 | Cathode C | 9 | Anode F |
| 5 | Common Cathode | 10 | Anode G |

WCN Opto Group Co., Limited

■ Features:

- High Reliability
- Color: White
- Low Power Requirement
- Easy Assembly

■ Description:

- Single Digit LED Display
- Digit Height: 56.80mm(2.24")
- Black Face and Milky Segment

■ Absolute Maximum Rating (Ta=25°C):

| Parameter | Symbol | Condition | Color | Rating | Units |
|----------------------------------|------------------|--------------------|-------|---------|-------|
| Power Dissipation Per Segment | P _a | — | White | 360/180 | mW |
| Forward Current Per Segment | I _F | — | White | 25/25 | mA |
| Peak Forward Current Per Segment | I _{FP} | 1/10 Duty 10KHz | White | 100 | mA |
| Reverse Voltage Per Segment | V _R | — | White | 20/10 | V |
| Operating Temperature Range | T _{opr} | — | — | -35~+85 | °C |
| Storage Temperature Range | T _{stg} | — | — | -35~+85 | °C |

■ Electrical/Optical Characteristics Rating(Ta=25°C)

| Item | Symbol | Test conditions | Location | Rating | | | Units |
|---|------------------|------------------------|----------------|--------|--------|-------|-------|
| | | | | Min. | Typ. | Max. | |
| Forward Voltage | V _F | I _F =20mA | Per Segment | — | 12.8 | 14.4 | V |
| | | | DP | — | 6.4 | 7.2 | |
| Reverse Current | I _R | V _R =20/10V | Per Segment/DP | — | — | 100 | μA |
| Luminous Intensity | I _v | I _F =10mA | Per Segment | 600 | 750 | 900 | mcd |
| CIE Coordinate | X | I _F =20mA | Per Segment | — | 0.2647 | — | nm |
| | Y | | | — | 0.2644 | — | |
| Spectral Line Half Width | △λ | I _F =20mA | Per Segment | — | 20 | — | nm |
| Luminous Intensity Matching Ratio (Segment To Segment) | I _{v-m} | I _F =10mA | | | | 1.2:1 | |

■ Soldering Conditions: Soldering Temp. ≤+260°C, Soldering Time. ≤3sec.
(at 2mm Distance from The Case of Reflector Edge)

LED Displays Reliability Test:

| CLASSIFICATION | TEST ITEM | DESCRIPTION AND TEST CONDITION |
|--------------------|--|---|
| ENDURANCE TEST | OPERATION LIFE | EVALUATES RESISTANCE OF THE DEVICE WHEN OPERATED AT ELECTRICAL STRESS T_a = UNDER ROOM TEMPERATURE $I_F = I_F \text{ max}$ |
| | HIGH TEMPERATURE HIGH HUMIDITY STORAGE | EVALUATES MOISTURE RESISTANCE OF THE DEVICE WHEN STORED FOR A LONG TERM AT HIGH TEMPERATURE AND HUMIDITY $T_a = 65 \pm 5^\circ\text{C}$ RH=90~95%RH TEST TIME=240± 2Hrs |
| | HIGH TEMPERATURE STORAGE | EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN HIGH TEMPERATURE $T_a = 85 \pm 5^\circ\text{C}$ (COB: $T_a = 65 \pm 5^\circ\text{C}$) TEST TIME=1000Hrs(-24Hrs, +72Hrs) |
| | LOW TEMPERATURE STORAGE | EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN LOW TEMPERATURE $T_a = -35 \pm 5^\circ\text{C}$ TEST TIME=1000Hrs(-24Hrs, +72Hrs) |
| ENVIRONMENTAL TEST | TEMPERATURE CYCLING | EVALUATES RESISTANCE OF DEVICE AT THERMAL STRESSES OR EXPANSION AND CONTRACTION $85^\circ\text{C} \sim 25^\circ\text{C} \sim -35^\circ\text{C} \sim 25^\circ\text{C}$ 30min 5min 30min 5min 10 CYCLES(COB: $T_{\text{hot}}=65^\circ\text{C}$, $T_{\text{cold}}=-25^\circ\text{C}$) |
| | THERMAL SHOCK | EVALUATES DEVICE STRUCTURE AND STRUCTURE AND MECHANICAL RESISTANCE WHEN SUDDENLY EXPOSED AT SERVE CHANGES $85 \pm 5^\circ\text{C} \sim -35 \pm 5^\circ\text{C}$ 10min 10min 10 CYCLES(COB: $T_{\text{hot}}=65^\circ\text{C}$, $T_{\text{cold}}=-25^\circ\text{C}$) |
| | SOLDERABILITY | EVALUATES SOLDERABILITY ON LEADS OF DEVICE $T_{\text{SOL}}=230 \pm 5^\circ\text{C}$ DWELL TIME=5±1sec. |
| | SOLDER RESISTANCE | EVALUATES RESISTANCE TO THERMAL STRESS CAUSED BY SOLDERING $T_{\text{SOL}}=260 \pm 5^\circ\text{C}$ DWELL TIME=10±1sec. |

Packing method A:

21 pcs / Red Expandable Polyethylene.

210 pcs / Box(360*265*255mm).

420 pcs / Carton(550*380*280mm).