

# Ningbo Junsheng Electronics Co.,Ltd.

## 0.39" (10.0mm) Three Digit 7 Segment Display

### Features:

- \*Ultra segment intensity
- \*Wide viewing angle
- \*Range of colors
- \*Gray face White segment
- \*RoHS compliant

### Available option:

- \*Alternative face and segment color
- \*Alternative font
- \*Cropped terminal pins
- \*Available emitting color
- \*Low current version

### Electro/Optical Characteristics $I_f=20mA$ $T_a=25^\circ C$

| Part Number<br>Common Cathode | Part Number<br>Common Anode | Emitting Color            | Peak<br>Wavelength | Forward Voltage $V_f$ |      | Luminous Intensity $I_v$ |        |
|-------------------------------|-----------------------------|---------------------------|--------------------|-----------------------|------|--------------------------|--------|
|                               |                             |                           |                    | Typ.                  | Max. | Min.                     | Typ.   |
| JS3-5031AUR-21                | JS3-5031BUR-21              | AlGaInP/GaAs Super Red    | 630                | 2.00                  | 2.50 | 10.00                    | 20.00  |
| JS3-5031AUE-21                | JS3-5031BUE-21              | AlGaInP/GaAs Ultra Red    | 625                | 2.00                  | 2.50 | 40.00                    | 80.00  |
| JS3-5031AUA-21                | JS3-5031BUA-21              | AlGaInP/GaAs Ultra Amber  | 605                | 2.00                  | 2.50 | 40.00                    | 60.00  |
| JS3-5031AUY-21                | JS3-5031BUY-21              | AlGaInP/GaAs Ultra Yellow | 590                | 2.00                  | 2.50 | 40.00                    | 60.00  |
| JS3-5031AUG-21                | JS3-5031BUG-21              | AlGaInP/GaAs Yellow Green | 574                | 2.10                  | 2.50 | 10.00                    | 15.00  |
| JS3-5031APG-21                | JS3-5031BPG-21              | InGaN/SiC Pure Green      | 525                | 3.30                  | 3.80 | 150.00                   | 200.00 |
| JS3-5031AUB-21                | JS3-5031BUB-21              | InGaN/SiC Ultra Blue      | 470                | 3.30                  | 3.80 | 40.00                    | 50.00  |
| JS3-5031AUW-21                | JS3-5031BUW-21              | InGaN/SiC Ultra White     | X-0.31/Y-0.31      | 3.30                  | 3.80 | 200.00                   | 400.00 |
| Units                         |                             |                           | nm                 | V                     |      | mcd                      |        |

### Maximum Ratings $T_a=25^\circ C$ (Derate above $25^\circ C$ )

| Characteristic                 | Test Condition                     | Symbol    | UR         | UE  | UA  | UY  | UG  | PG  | UB  | UW  | Units      |
|--------------------------------|------------------------------------|-----------|------------|-----|-----|-----|-----|-----|-----|-----|------------|
| Pulse Forward Current Per Seg. | 1/10 duty cycle 0.1ms Pulse width  | $I_{FP}$  | 100        | 100 | 100 | 100 | 100 | 100 | 100 | 100 | mA         |
| DC Forward Current Per Seg.    |                                    | $I_F$     | 30         | 30  | 30  | 30  | 30  | 30  | 30  | 30  | mA         |
| Reverse Current Per Seg.       | $V_R=5V$                           | $I_R$     | 10         | 10  | 10  | 10  | 10  | 10  | 10  | 10  | $\mu A$    |
| Power Dissipation              |                                    | $P_D$     | 36         | 40  | 42  | 42  | 44  | 66  | 66  | 66  | mW         |
| Operating Temperature          |                                    | $T_{OPR}$ | -40 to +80 |     |     |     |     |     |     |     | $^\circ C$ |
| Storage Temperature            |                                    | $T_{TSG}$ | -40 to +85 |     |     |     |     |     |     |     | $^\circ C$ |
| Lead soldering temperature     | 1.60mm from body maximum 3 seconds |           | 260        |     |     |     |     |     |     |     | $^\circ C$ |

Checked

Becky Sun

Approved

Jason Lou

Date

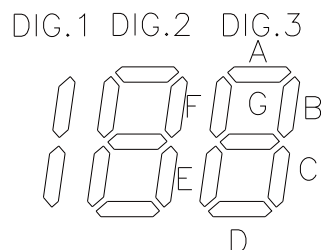
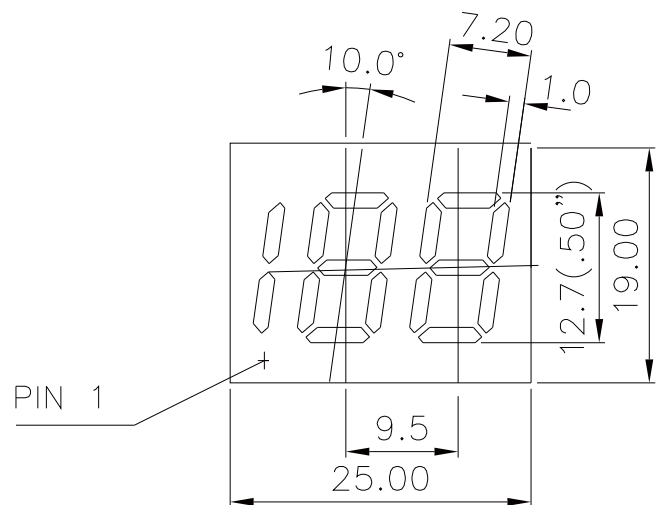
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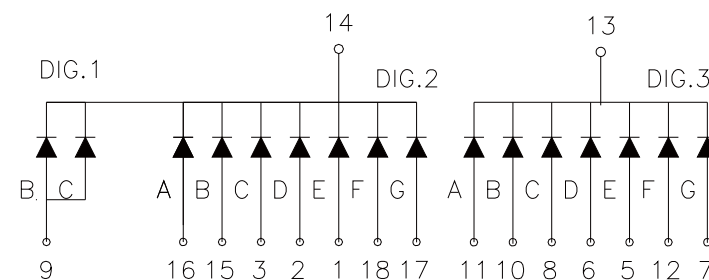
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### PACKAGE DIMENSION

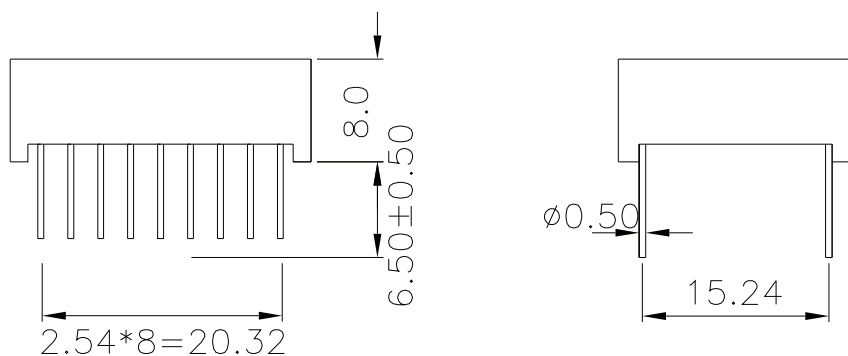
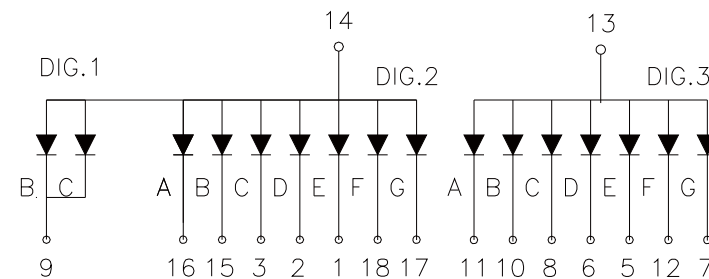


### INTERNAL CIRCUIT DIAGRAM

#### Common Cathode JS3-5031Ax



#### Common Anode JS3-5031Bx



Tolerance  $\pm 0.25\text{mm}$  unless stated

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