

# Ningbo Junsheng Electronics Co.,Ltd.

## 1.20"(30.60mm)Single Digit 7 Segment Display

### Features:

- \*Ultra segment intensity
- \*Wide viewing angle
- \*Range of colors
- \*Gray/Black 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 If=20mA Ta=25°C

| Part Number<br>Common Cathode | Part Number<br>Common Anode | Emitting Color            | Peak<br>Wavelength | Forward Voltage V <sub>F</sub> |      | Luminous Intensity I <sub>v</sub> |        |
|-------------------------------|-----------------------------|---------------------------|--------------------|--------------------------------|------|-----------------------------------|--------|
|                               |                             |                           |                    | Typ.                           | Max. | Min.                              | Typ.   |
| JSD-12011EUR                  | JSD-12011FUR                | AlGaInP/GaAs Ultra Red    | 635                | 2.00                           | 2.50 | 40.00                             | 80.00  |
| JSD-12011EUE                  | JSD-12011FUE                | AlGaInP/GaAs Super Red    | 625                | 2.00                           | 2.50 | 80.00                             | 160.00 |
| JSD-12011EUA                  | JSD-12011FUA                | AlGaInP/GaAs Ultra Amber  | 605                | 2.00                           | 2.50 | 80.00                             | 120.00 |
| JSD-12011EUY                  | JSD-12011FUY                | AlGaInP/GaAs Ultra Yellow | 590                | 2.00                           | 2.50 | 80.00                             | 120.00 |
| JSD-12011EUG                  | JSD-12011FUG                | AlGaInP/GaAs Yellow Green | 574                | 2.10                           | 2.50 | 20.00                             | 40.00  |
| JSD-12011EPG                  | JSD-12011FPG                | InGaN/SiC Pure Green      | 525                | 3.30                           | 3.80 | 300.00                            | 400.00 |
| JSD-12011EUB                  | JSD-12011FUB                | InGaN/SiC Ultra Blue      | 470                | 3.30                           | 3.80 | 80.00                             | 160.00 |
| JSD-12011EUW                  | JSD-12011FUW                | InGaN/SiC Ultra White     | X-0.31/Y-0.31      | 3.30                           | 3.80 | 400.00                            | 800.00 |
| Units                         |                             |                           | nm                 | V                              |      | mcd                               |        |

### Maximum Ratings Ta=25°C (Derate above 25°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 <sub>FP</sub>  | 100        | 100 | 100 | 100 | 100 | 100 | 100 | 100 | mA    |
| DC Forward Current Per Seg.    |                                    | I <sub>F</sub>   | 30         | 30  | 30  | 30  | 30  | 30  | 30  | 30  | mA    |
| Reverse Current Per Seg.       | V <sub>R</sub> =5V                 | I <sub>R</sub>   | 10         | 10  | 10  | 10  | 10  | 10  | 10  | 10  | μA    |
| Power Dissipation              |                                    | P <sub>D</sub>   | 36         | 40  | 42  | 42  | 44  | 66  | 66  | 66  | mW    |
| Operating Temperature          |                                    | T <sub>OPR</sub> | -40 to +80 |     |     |     |     |     |     |     | °C    |
| Storage Temperature            |                                    | T <sub>TSG</sub> | -40 to +85 |     |     |     |     |     |     |     | °C    |
| Lead soldering temperature     | 1.60mm from body maximum 3 seconds |                  | 260        |     |     |     |     |     |     |     | °C    |

Checked

Becky Sun

Approved

Jason Lou

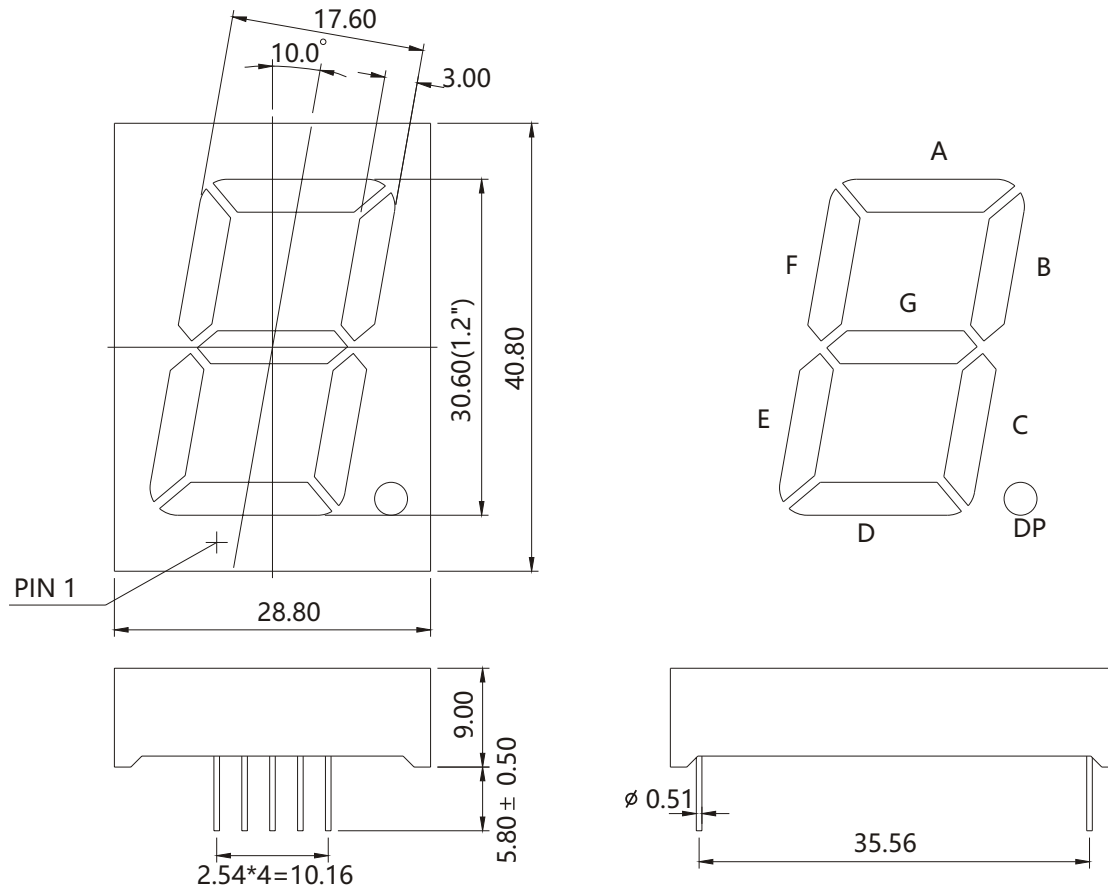
Date

Aug/14/2013

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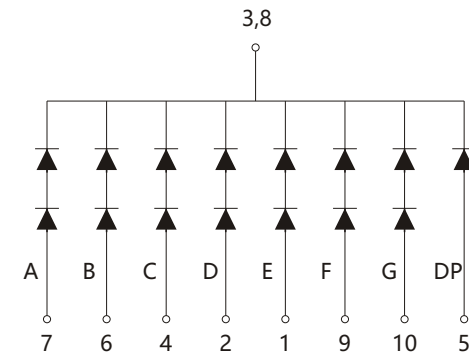
PACKAGE DIMENSION



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

INTERNAL CIRCUIT DIAGRAM

Common Cathode  
JSD-12011Ex



Common Anode  
JSD-12011Fx

