

Ningbo Junsheng Electronics Co.,Ltd.

0.40"(10.16mm)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 Common Cathode | Part Number Common Anode | Emitting Color | Peak Wavelength | Forward Voltage V _F | | Luminous Intensity I _v | |
|-------------------------------|-----------------------------|---------------------------|--------------------|--------------------------------|------|-----------------------------------|--------|
| | | | | Typ. | Max. | Min. | Typ. |
| JSD-4012AUR | JSD-4012BUR | AlGaInP/GaAs Ultra Red | 635 | 2.00 | 2.50 | 20.00 | 40.00 |
| JSD-4012AUE | JSD-4012BUE | AlGaInP/GaAs Super Red | 625 | 2.00 | 2.50 | 40.00 | 80.00 |
| JSD-4012AUA | JSD-4012BUA | AlGaInP/GaAs Ultra Amber | 605 | 2.00 | 2.50 | 40.00 | 60.00 |
| JSD-4012AUY | JSD-4012BUY | AlGaInP/GaAs Ultra Yellow | 590 | 2.00 | 2.50 | 40.00 | 60.00 |
| JSD-4012AUG | JSD-4012BUG | AlGaInP/GaAs Yellow Green | 574 | 2.10 | 2.50 | 10.00 | 20.00 |
| JSD-4012APG | JSD-4012BPG | InGaN/SiC Pure Green | 525 | 3.30 | 3.80 | 150.00 | 200.00 |
| JSD-4012AUB | JSD-4012BUB | InGaN/SiC Ultra Blue | 470 | 3.30 | 3.80 | 40.00 | 80.00 |
| JSD-4012AUW | JSD-4012BUW | InGaN/SiC Ultra White | X-0.31/Y-0.31 | 3.30 | 3.80 | 200.00 | 400.00 |
| Units | | | nm | V | | mcd | |

Maximum Ratings Ta=25°C (Derate above 25°C)

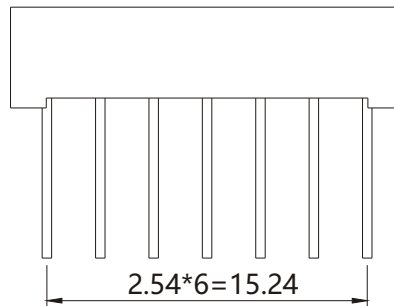
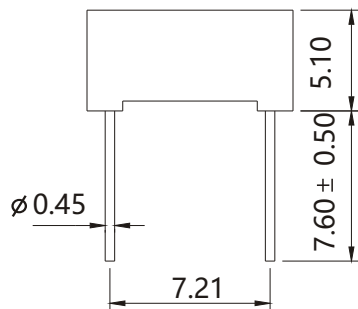
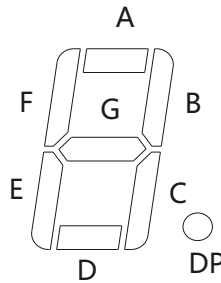
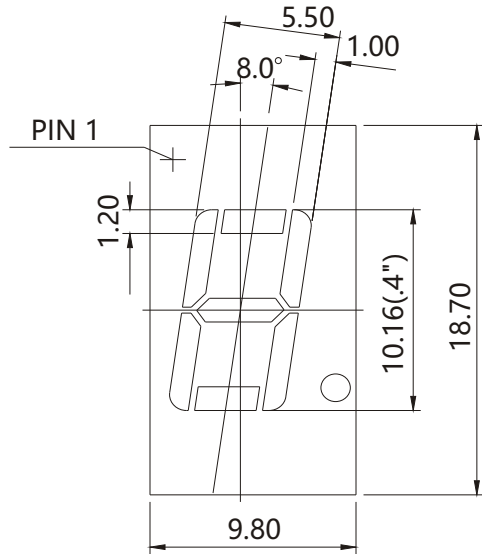
| Characteristic | Test Condition | Symbol | UR | UE | UA | UY | UG | PG | UB | UW | Units |
|--------------------------------|------------------------------------|------------------|------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Pulse Forward Current Per Seg. | 1/10 duty cycle 0.1ms Pulse width | I _{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 | μA |
| Power Dissipation | | P _D | 36 | 40 | 42 | 42 | 44 | 66 | 66 | 66 | mW |
| Operating Temperature | | T _{OPR} | -40 to +80 | | | | | | | | °C |
| Storage Temperature | | T _{TSG} | -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 | PAGE 1 /2 |
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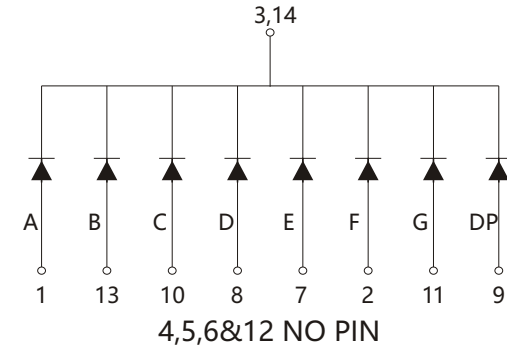
PACKAGE DIMENSION



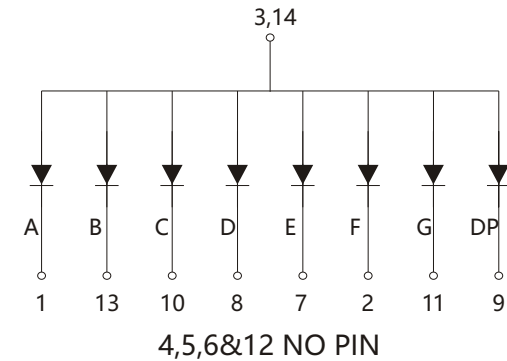
Tolerance $\pm 0.25\text{mm}$ unless stated

INTERNAL CIRCUIT DIAGRAM

Common Cathode JSD-4012Ax



Common Anode JSD-4012Bx



Checked

Becky Sun

Approved

Jason Lou

Date

Aug/14/2013

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