

LD40011A/B Series – 4.00 inch Single Digit 7 Segment LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



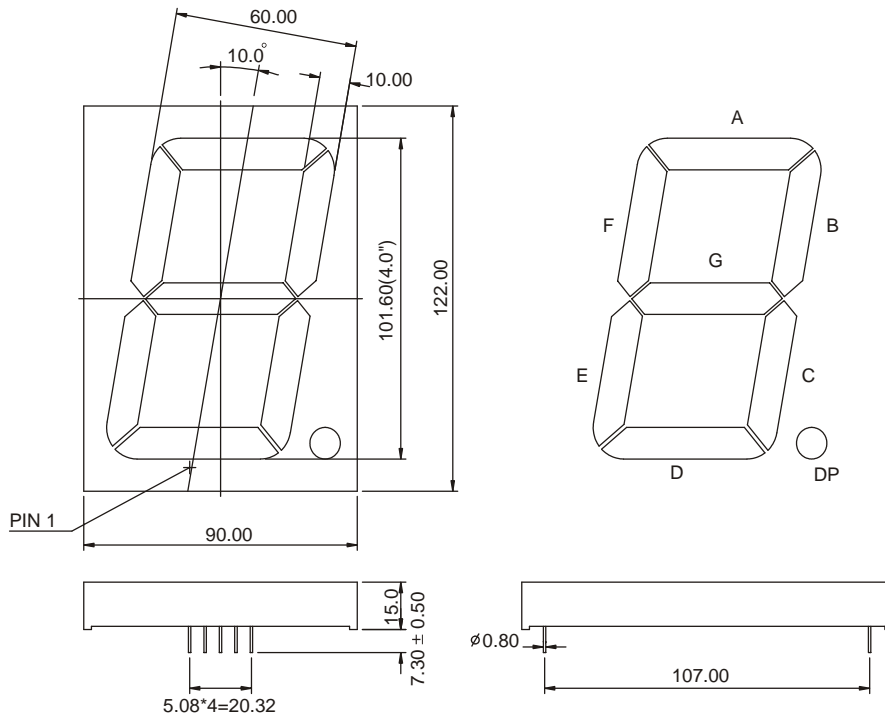
Features

- 101.60 mm (4.00 inch) digit high
- Excellent digit appearance
- Wide viewing angle
- Range of emitted colors
- I.C. compatible
- Low power consumption
- White segment, black face
- RoHS compliant

Available options

- Alternative emitting luminosity:
Standard or high brightness version
- Alternative emitted color
- Alternative face and segment color
- Alternative font
- Both CA and CC versions are available
- Cropped terminal pins

Package Dimensions

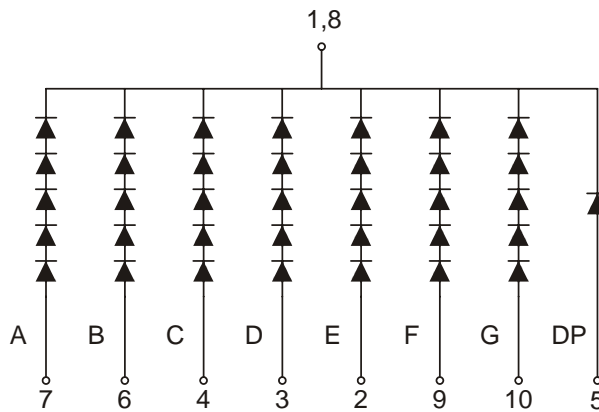


Notes:

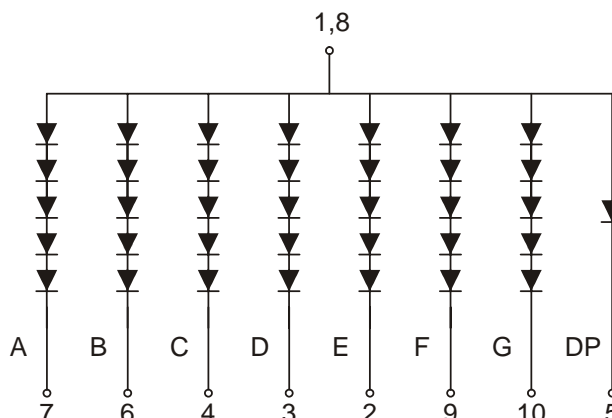
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD40011A (Common Cathode)



LD40011B (Common Anode)



Selection Guide

Single Digit 7 Segment LED Display, Digit Height: 101.60mm(4.00inch), External Dimensions: 90.00x122.00x15.00mm (L x W x H)

| Part No. | | Chip | | | Iv@IF=20mA | | Iv@IF=20mA | |
|------------|------------|----------|--------------|-----|------------|-------|------------|------|
| CC | CA | Material | Color | WLD | One Seg | | One DP | |
| | | | | | Min. | Typ. | Min. | Typ. |
| LD40011AR | LD40011BR | GaAlAs | Super Red | 640 | 30 | 37.5 | 8 | 10 |
| LD40011AD | LD40011BD | GaAlAs | Hi-Red | 640 | 67.5 | 93.75 | 18 | 25 |
| LD40011AO | LD40011BO | GaAsP | Orange | 625 | 26.25 | 33.75 | 7 | 9 |
| LD40011AY | LD40011BY | GaAsP | Yellow | 588 | 30 | 37.5 | 8 | 10 |
| LD40011AG | LD40011BG | GaP | Green | 568 | 26.25 | 33.75 | 7 | 9 |
| LD40011AUR | LD40011BUR | AlGaInP | Ultra Red | 640 | 112.5 | 168.8 | 30 | 45 |
| LD40011AUO | LD40011BUO | AlGaInP | Ultra Orange | 625 | 168.75 | 225 | 45 | 60 |
| LD40011AUA | LD40011BUA | AlGaInP | Ultra Amber | 65 | 112.5 | 168.8 | 30 | 45 |
| LD40011AUY | LD40011BUY | AlGaInP | Ultra Yellow | 595 | 112.5 | 168.8 | 30 | 45 |
| LD40011AUG | LD40011BUG | AlGaInP | Ultra Green | 573 | 112.5 | 168.8 | 30 | 45 |
| LD40011APG | LD40011BPG | InGaN | Pure Green | 525 | 450 | 1125 | 120 | 300 |
| LD40011AUB | LD40011BUB | InGaN | Ultra Blue | 470 | 112.5 | 168.8 | 30 | 45 |
| LD40011AUW | LD40011BUW | SMD | Ultra White | \ | 375 | 450 | 100 | 120 |
| Unit: | \ | \ | \ | nm | mcd | mcd | mcd | mcd |

Electrical Characteristics & Absolute Maximum Ratings

| Parameter | | Electrical optical Characteristics ^[1] | | | Absolute Maximum Ratings ^[1] | | |
|---------------|----------|---|------|-----------------------|---|--------------------|-------------------------------------|
| Emitted color | | Forward Voltage @ IF=20mA | | Reverse Current VR=5V | Power Dissipation | DC Forward Current | Peak Forward Current ^[2] |
| | | Typ. | Max. | | | | |
| Super Red | Per Seg. | 1.8 | 2.2 | 30 | 60 | 25 | 100 |
| | Per DP | 1.8 | 2.2 | 30 | 60 | 25 | 100 |
| Hi-Red | Per Seg. | 1.8 | 2.2 | 30 | 60 | 25 | 100 |
| | Per DP | 1.8 | 2.2 | 30 | 60 | 25 | 100 |
| Orange | Per Seg. | 2.1 | 2.5 | 30 | 80 | 30 | 100 |
| | Per DP | 2.1 | 2.5 | 30 | 80 | 30 | 100 |
| Yellow | Per Seg. | 2.1 | 2.5 | 30 | 80 | 30 | 100 |
| | Per DP | 2.1 | 2.5 | 30 | 80 | 30 | 100 |
| Green | Per Seg. | 2.2 | 2.5 | 30 | 80 | 30 | 100 |
| | Per DP | 2.2 | 2.5 | 30 | 80 | 30 | 100 |
| Ultra Red | Per Seg. | 1.9 | 2.6 | 30 | 60 | 30 | 100 |
| | Per DP | 1.9 | 2.6 | 30 | 60 | 30 | 100 |
| Ultra Orange | Per Seg. | 2 | 2.6 | 30 | 65 | 30 | 100 |
| | Per DP | 2 | 2.6 | 30 | 65 | 30 | 100 |
| Ultra Amber | Per Seg. | 2 | 2.6 | 30 | 65 | 30 | 100 |
| | Per DP | 2 | 2.6 | 30 | 65 | 30 | 100 |
| Ultra Yellow | Per Seg. | 2 | 2.6 | 30 | 65 | 30 | 100 |
| | Per DP | 2 | 2.6 | 30 | 65 | 30 | 100 |
| Ultra Green | Per Seg. | 2.1 | 2.6 | 30 | 75 | 30 | 100 |
| | Per DP | 2.1 | 2.6 | 30 | 75 | 30 | 100 |
| Pure Green | Per Seg. | 3.5 | 4 | 30 | 110 | 30 | 100 |
| | Per DP | 3.5 | 4 | 30 | 110 | 30 | 100 |
| Ultra Blue | Per Seg. | 3.5 | 4 | 30 | 120 | 30 | 100 |
| | Per DP | 3.5 | 4 | 30 | 120 | 30 | 100 |
| Ultra White | Per Seg. | 3.5 | 4 | 30 | 120 | 30 | 100 |
| | Per DP | 3.5 | 4 | 30 | 120 | 30 | 100 |
| Unit: | \ | V | V | uA | mW | mA | mA |

Notes:

1. At Ta = 25 °C.

2. Peak forward current at 1/10 Duty Cycle, 0.1ms Pulse.