

LD12011A/BRG Series - 1.20 inch Single Digit 7 Segment Dual-color LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



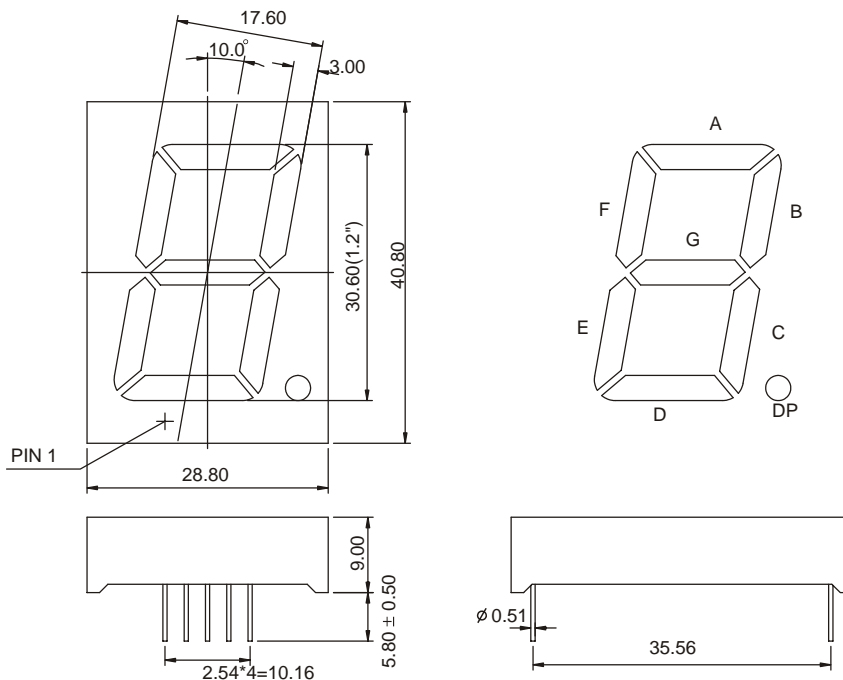
Features

- 30.60 mm (1.20 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

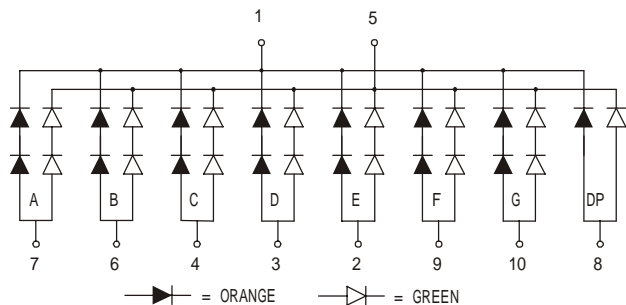


Notes:

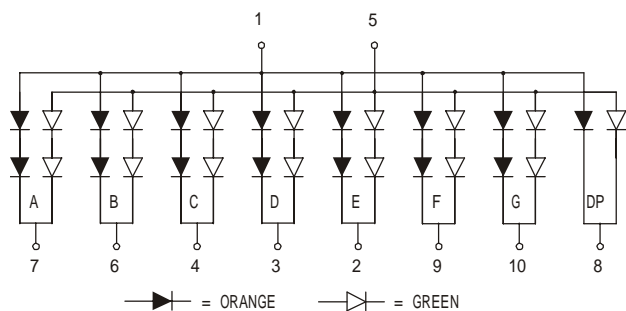
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD2011ARG (Common Cathode)



LD2011BRG (Common Anode)



Selection Guide

| Single Digit 7 Segment LED Display, Digit Height: 30.60mm(1.20inch), External Dimensions: 28.80x40.80x9.00mm (L x W x H) | | | | | | | |
|---|--------------|--------------|----------|-------------|-----------|--------------|----------|
| Description | Part No. | | Chip | | | Iv(mcd)@20mA | |
| | Cathode Row | Anode Row | Material | Color | W LD (nm) | One Seg(DP) | |
| | | | | | | Min. | Typ. |
| Standard Brightness | LD12011ARG | LD12011BRG | GaAlAs | Super Red | 640 | 12(8) | 15(10) |
| | | | GaP | Green | 568 | 10.5(7) | 13.5(9) |
| Ultra-High Brightness | LD12011AURUG | LD12011BURUG | AlGaInP | Ultra Red | 640 | 45(30) | 67.5(45) |
| | | | AlGaInP | Ultra Green | 573 | 45(30) | 67.5(45) |

Electrical Characteristics & Absolute Maximum Ratings

| LD12011BURPGUB | | Electrical optical Characteristics ^[1] | | Absolute Maximum Ratings ^[1] | | |
|----------------|---------------------------------|---|----------------------------------|---|----------------------------|---|
| Color | Forward Voltage(V) @ IF=20mA | | Reverse Current VR=5V (uA) | Power Dissipation (mW) | DC Forward Current (mA) | Peak Forward Current ^[2] (mA) |
| | One Seg (DP) | Typ. | | | | |
| Super Red | 3.6(1.8) | 4.4(2.2) | 50(30) | 120(60) | 25 | 100 |
| Green | 4.4(2.2) | 5.0(2.5) | 50(30) | 160(80) | 30 | 100 |
| Ultra Red | 3.8(1.9) | 5.2(2.6) | 50(30) | 120(60) | 30 | 100 |
| Ultra Green | 4.2(2.1) | 5.2(2.6) | 50(30) | 150(75) | 30 | 100 |

Operating/ Storage Temp.: -40 to +80 deg.;

Lead Solder Temp.: 260 deg. for 3-5 Sec. 2mm below package base

Notes:

1. At Ta = 25 °C.
2. Peak forward current at 1/10 Duty Cycle, 0.1ms Pulse.