

Single Digit Numeric SMD Display(LSD2011A/B Series)

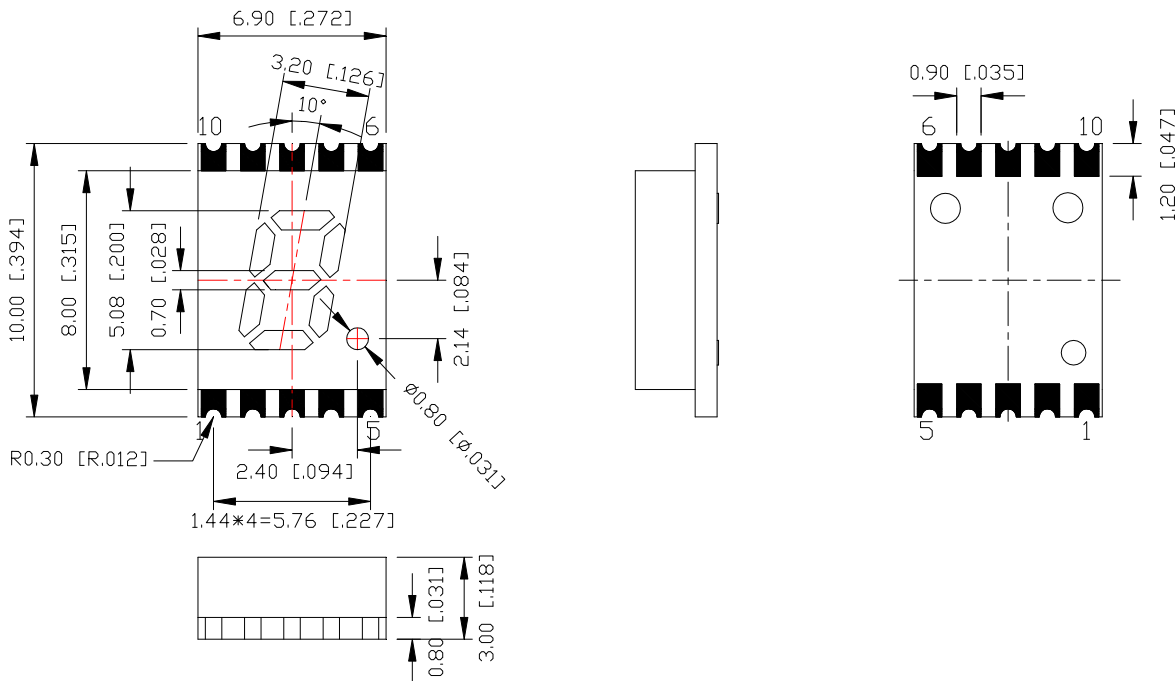
1. DESCRIPTION:

- Gray face, White Epoxy
- Common Cathode or Anode Display
- Emitting color: single color
- RoHS and REACH Compliant

2. FEATURES:

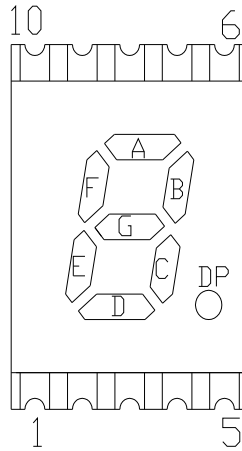
- High intensity and reliability
- High quality, Low power requirement
- IC compatible, Easy assembly

3. Outer Dimension:



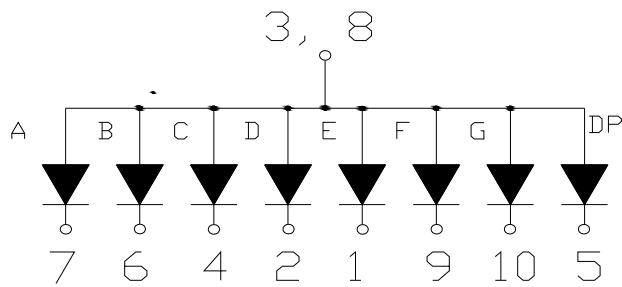
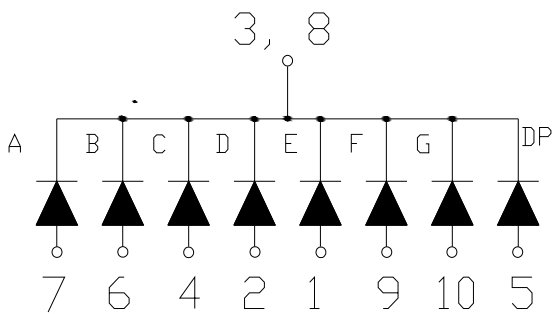
NOTES: All dimensions are in millimeters (inches) tolerance are $\pm 0.25\text{mm}$ (0.010) unless otherwise noted

4. INTERNAL CIRCUIT DIAGRAM



LSD2011A(Common Cathode)

LSD2011B(Common Anode)



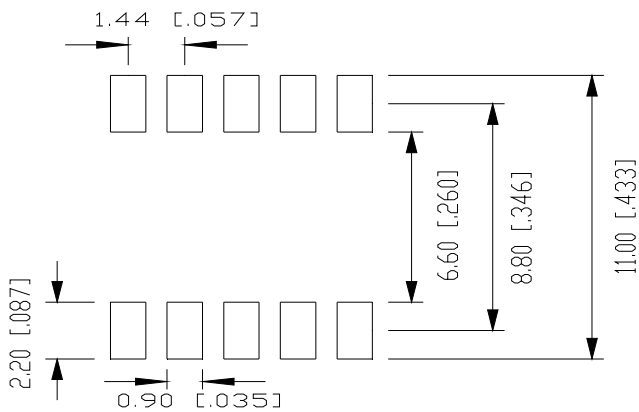
5. Selection Guide:

| Part No. | | Chip | | | Iv@IF=20mA | |
|----------------|--------------|----------|------------|-------------|------------|------|
| Common Cathode | Common Anode | Material | Color | WLD | Per Chip | |
| | | | | | Min. | Typ. |
| LSD2011AR | LSD2011BR | AlGaInP | Super Red | 640 | - | 8 |
| LSD2011AUR | LSD2011BUR | AlGaInP | Ultra Red | 620 | - | 15 |
| LSD2011AO | LSD2011BO | AlGaInP | Orange | 605 | - | 40 |
| LSD2011AY | LSD2011BY | AlGaInP | Yellow | 580 | - | 50 |
| LSD2011AG | LSD2011BG | AlGaInP | Green | 570 | - | 16 |
| LSD2011APG | LSD2011BPG | InGaN | Pure Green | 520 | - | 35 |
| LSD2011AB | LSD2011BB | InGaN | Blue | 470 | - | 25 |
| LSD2011AW | LSD2011BW | InGaN | White | x0.27/y0.25 | - | 60 |
| Unit: | \ | \ | \ | nm | mcd | mcd |

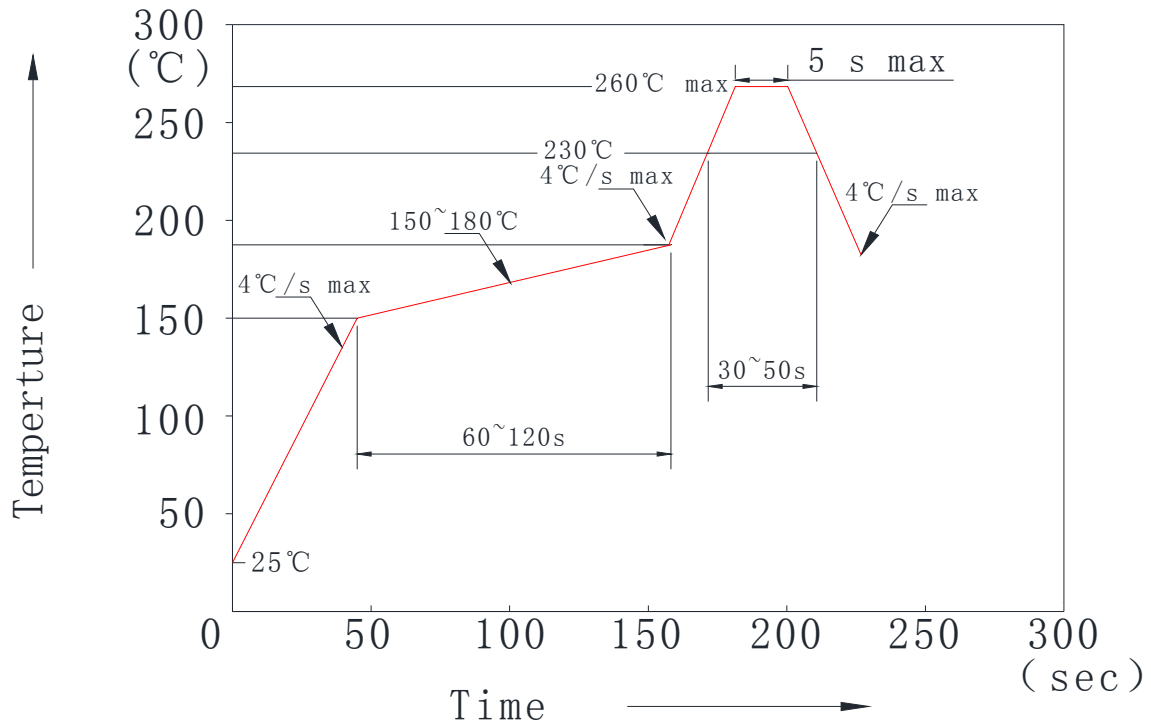
6. Electrical Characteristics & Absolute Maximum Ratings

| Parameter | Electrical optical Characteristics ^[1] | | Absolute Maximum Ratings ^[1] | | | |
|------------|---|------|---|-------------------|--------------------|-------------------------------------|
| | Forward Voltage @ IF=20mA | | Reverse Current VR=5V | Power Dissipation | DC Forward Current | Peak Forward Current ^[2] |
| Per Chip | Typ. | Max. | | | | |
| Super Red | 2.0 | 2.6 | 30 | 60 | 20 | 100 |
| Ultra Red | 2.0 | 2.6 | 30 | 65 | 20 | 100 |
| Orange | 2.0 | 2.6 | 30 | 65 | 20 | 100 |
| Yellow | 2.0 | 2.6 | 30 | 65 | 20 | 100 |
| Green | 2.0 | 2.6 | 30 | 75 | 20 | 100 |
| Pure Green | 3.0 | 3.6 | 30 | 85 | 20 | 100 |
| Blue | 3.0 | 3.6 | 30 | 85 | 20 | 100 |
| White | 3.0 | 3.6 | 30 | 85 | 20 | 100 |
| Unit: | V | V | uA | mW | mA | mA |

7. Recommended Soldering Pattern:



8. Recommended SMT condition:



NOTES:

1. We recommend the reflow temperature 245°C (+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.