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| Spec. No. | PS-DS-S56124/S56125B7 |
| Rev. | A |

PRODUCT SPECIFICATION

Model No:CSS-S56124B7/S56125B7

Descriptions:

- 0.56 Inch Single Digit SMD Display
- Emitting Color : Super Bright Blue



| CUSTOMER APPROVED SIGNATURES | APPROVED BY | CHECKED BY | PREPARED BY |
|---------------------------------|-------------|------------|-------------|
| | | | |

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Model No : CSS-S56124/S56125B7

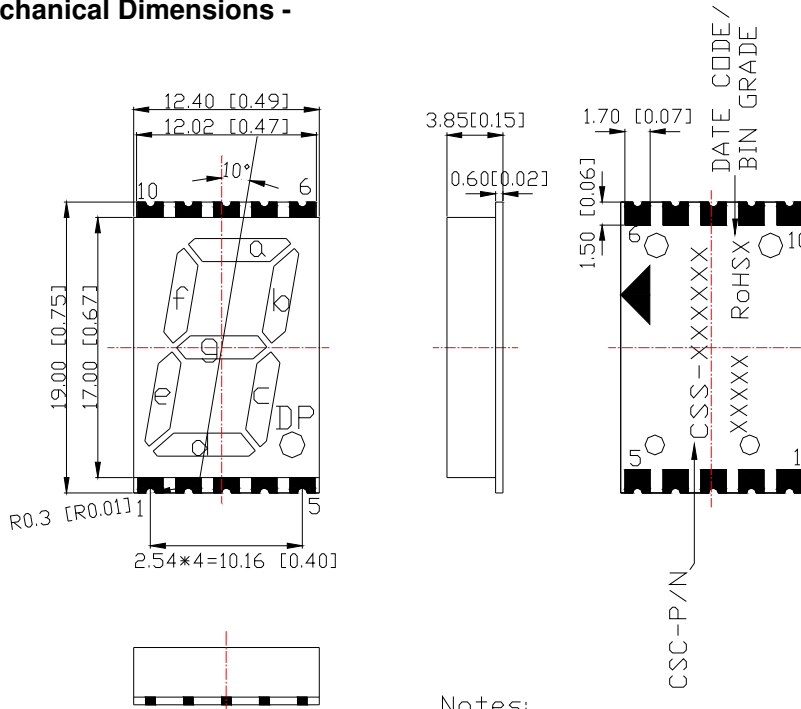
Features -

1. 0.56 inch (14.2mm) digit height.
2. Qualified according to JEDEC moisture sensitivity Level 2a.
3. RoHS compliant.
4. Low power consumption.
5. ESD > 1KV(HBM).
6. Easy mounting on P.C. board.

Device Selection Guide -

| Model No. | Chip | | Description |
|--------------|----------|-------------------|----------------|
| | Material | Emitting Color | |
| CSS-S56124B7 | InGaN | Super Bright Blue | Common Anode |
| CSS-S56125B7 | InGaN | Super Bright Blue | Common Cathode |

Mechanical Dimensions -



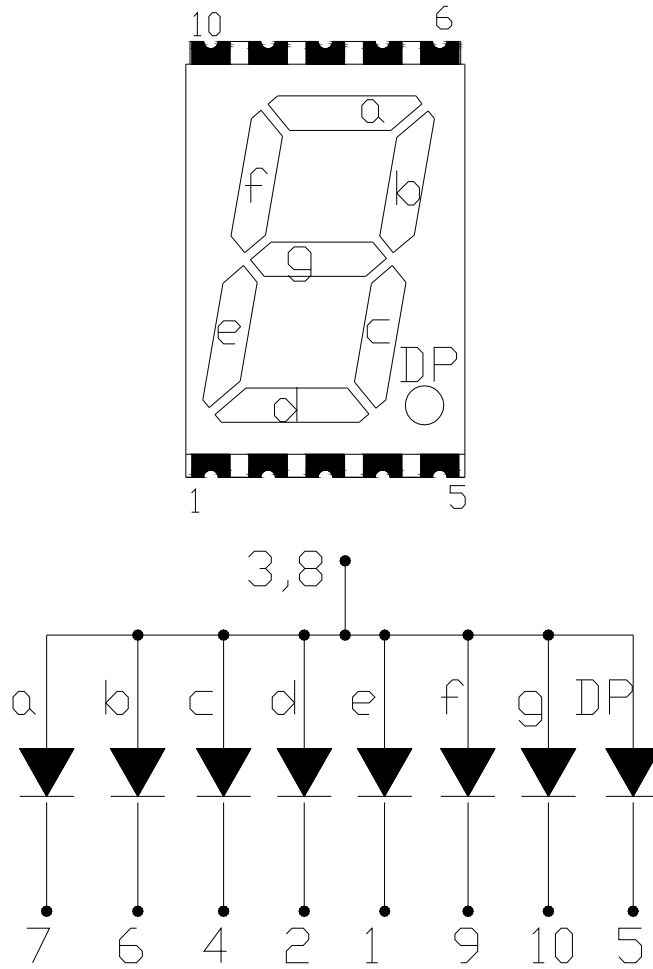
Notes:

All dimensions are in millimeters [inches], and tolerance is ±0.25 [0.010] unless otherwise noted.



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Internal Circuit Diagrams -



CSS-S56124 Common Anode
(CSS-S56125 Common Cathode)



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■ Absolute Maximum Rating -

(Ta=25°C)

| Parameter | Symbol | Rating | Unit |
|---|------------------|------------|-------|
| Power Dissipation Per Dice | P _{AD} | 120 | mW |
| Continuous Forward Current Per Dice | I _{AF} | 30 | mA |
| Peak Current Per Dice(duty cycle 1/10,1KHz) | I _{PF} | 100 | mA |
| Derating Linear From 25°C Per Dice | - | 0.4 | mA/°C |
| Reverse Voltage Per Dice | V _R | 5 | V |
| Operating Temp. | T _{opr} | -40 ~ +105 | °C |
| Storage Temp. | T _{stg} | -40 ~ +105 | °C |

Note:Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C

■ Electro-optical Characteristics -

(Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|-----------------------------------|------------------|------|------|------|------|----------------------|
| Forward Voltage Per Segment | V _F | - | 3.5 | 4 | V | I _F =20mA |
| Luminous Intensity Per Segment | I _v | 5 | 12 | - | mcd | I _F =10mA |
| Dominant Wavelength | λ _d | - | 470 | - | nm | I _F =20mA |
| Spectrum Radiation Bandwidth | Δλ | - | 30 | - | nm | I _F =20mA |
| Reverse Current | I _R | - | - | 50 | μA | V _R =5V |
| Luminous Intensity Matching Ratio | I _{V-m} | - | - | 2:1 | - | I _F =10mA |



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

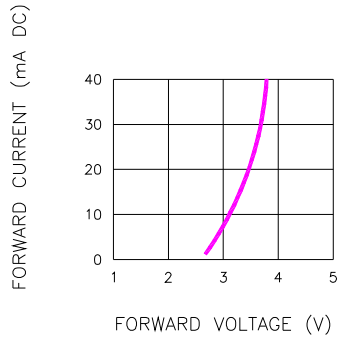


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

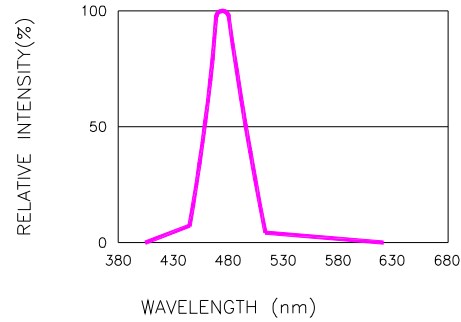


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

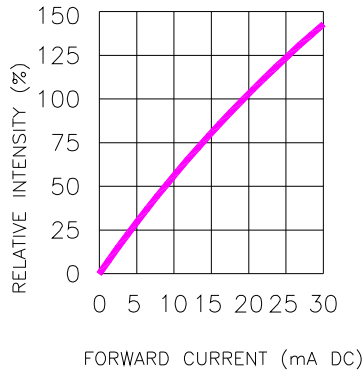


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

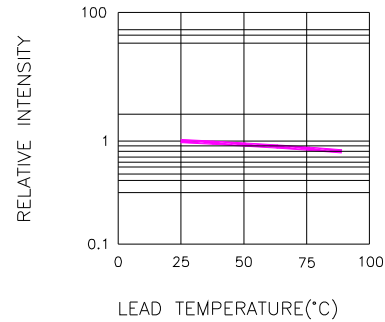


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us
PULSE, 10ms PERIOD)

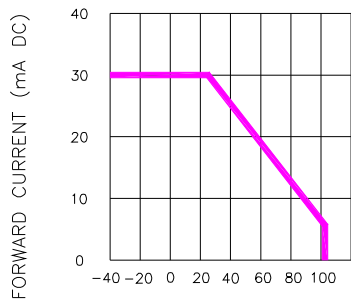


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

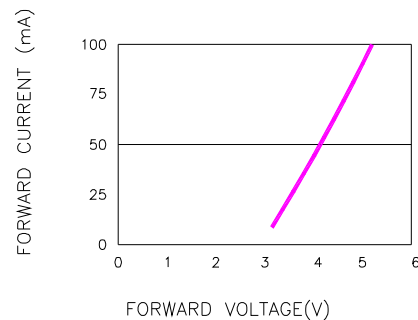


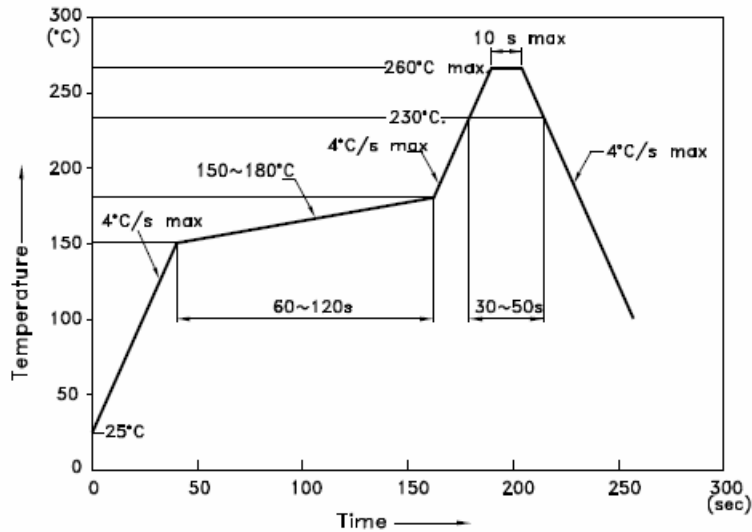
Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE,
1% DUTY CYCLE)



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SMT REFLOW SOLDERING INSTRUCTIONS

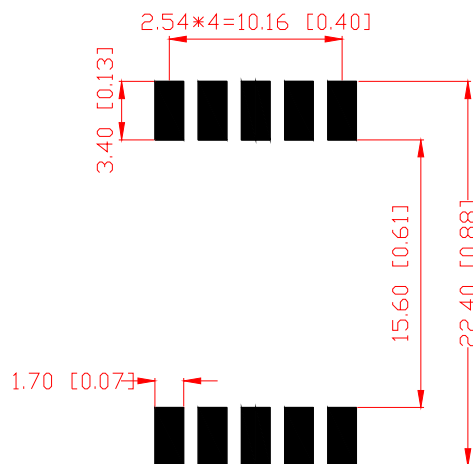
■ IR Reflow Temperature / Time :



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.

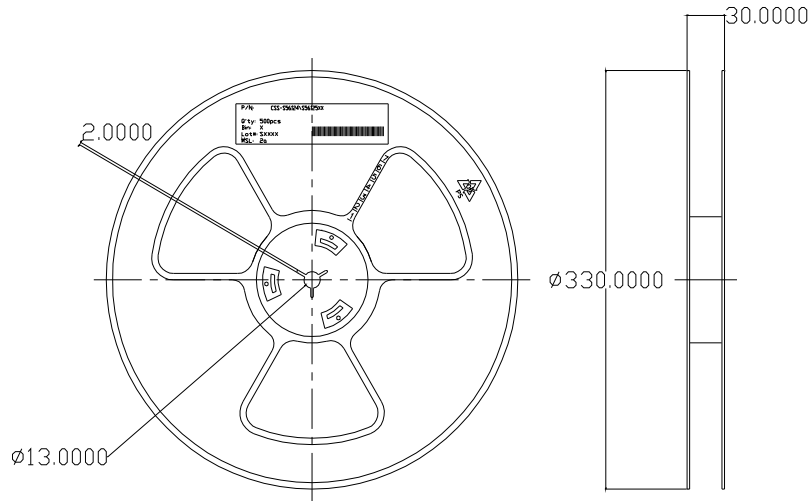
■ Soldering Pad Size





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REEL DIMENSIONS



PACKING & LABEL SPECIFICATIONS

