



# PRODUCT SPECIFICATION

**Model No : CST-5234B7/5235B7**

## Descriptions:

- 0.52 Inch Triad Digit Display
- CST-5234: Common Anode
- CST-5235: Common Cathode
- Emitting Color: Super Bright Blue



| CUSTOMER APPROVED<br>SIGNATURES | APPROVED BY | CHECKED BY | PREPARED BY |
|---------------------------------|-------------|------------|-------------|
|                                 |             |            |             |

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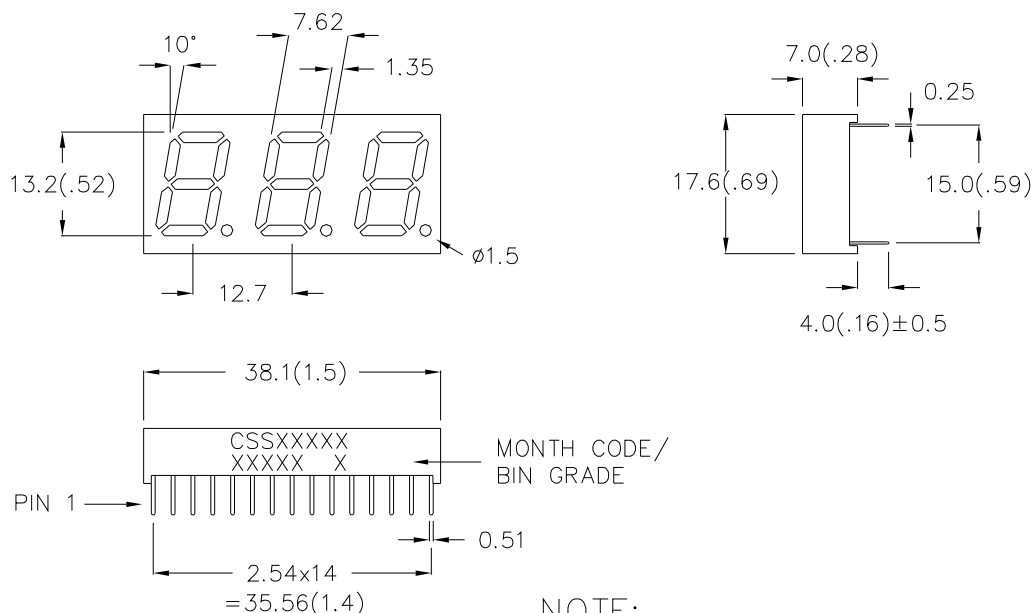
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**Model No : CST-5234/5235B7**
**Features -**

1. 0.52 inch (13.2mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. ESD > 1KV(HBM)
6. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

| Part No.   | Chip     |                   | Description    |
|------------|----------|-------------------|----------------|
|            | Material | Emitted Color     |                |
| CST-5234B7 | InGaN    | Super Bright Blue | Common Anode   |
| CST-5235B7 | InGaN    | Super Bright Blue | Common Cathode |

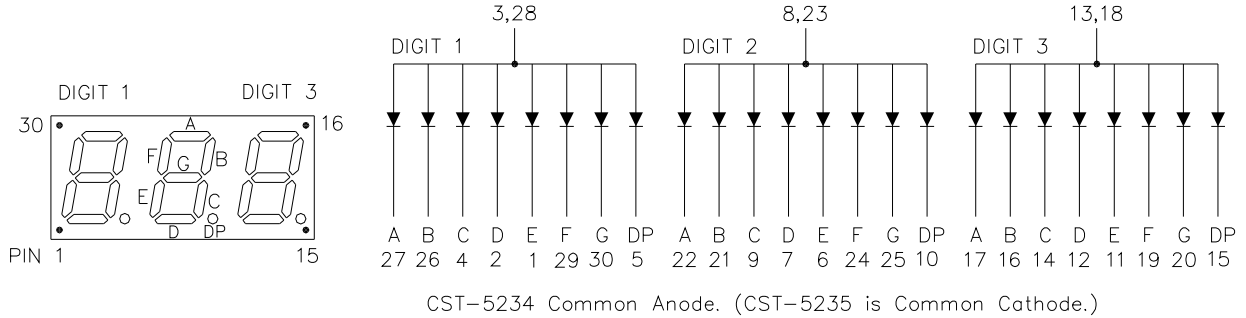
**Package Dimensions -**

**NOTE:**

2. Dimension in millimeter (inch), and tolerance is  $\pm 0.25$  (.01) unless otherwise noted.



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**Internal Circuit Diagrams -**



**Absolute Maximum Rating -**

(Ta=25°C)

| Parameter   | Symbol      | Rating    | Unit  |
|---|-------------|-----------|-------|
| Power Dissipation Per Dice  | <b>PAD</b>  | 120       | mW    |
| Continuous Forward Current Per Dice                                     | <b>IAF</b>  | 30        | mA    |
| Peak Current Per Dice(duty cycle 1/10, 1kHz)                            | <b>IPF</b>  | 100       | mA    |
| Derating Linear From 25°C Per Dice                                      | -           | 0.4       | mA/°C |
| Reverse Voltage Per Dice  | <b>VR</b>   | 5         | V     |
| Operating Temp.   | <b>Topr</b> | -35 ~ +85 | °C    |
| Storage Temp.   | <b>Tstg</b> | -35 ~ +85 | °C    |
| Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C |             |           |       |


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**Electro-optical Characteristics -**

(Ta=25°C)

| Parameter                         | Symbol           | Min. | Typ. | Max. | Unit          | Condition         |
|-----------------------------------|------------------|------|------|------|---------------|-------------------|
| Forward Voltage Per Segment       | $V_F$            | -    | 3.5  | 4    | V             | $I_F=20\text{mA}$ |
| Luminous Intensity Per Segment    | $I_v$            | -    | 20   | -    | mcd           | $I_F=10\text{mA}$ |
| Peak Emission Wavelength          | $\lambda_p$      | -    | 468  | -    | nm            | $I_F=20\text{mA}$ |
| Dominant Wavelength               | $\lambda_d$      | -    | 470  | -    | nm            | $I_F=20\text{mA}$ |
| Spectrum Radiation Bandwidth      | $\Delta \lambda$ | -    | 20   | -    | nm            | $I_F=20\text{mA}$ |
| Reverse Current                   | $I_R$            | -    | -    | 50   | $\mu\text{A}$ | $V_R=5\text{V}$   |
| Luminous Intensity Matching Ratio | <b>IV-m</b>      | -    | -    | 2:1  | -             | $I_F=10\text{mA}$ |





|           |               |
|-----------|---------------|
| Spec. No. | PS-ND-0809010 |
| Rev.      | A             |

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**Typical Electrical / Optical Characteristics Curves -**

( $T_a = 25^\circ\text{C}$  Unless Otherwise Noted)

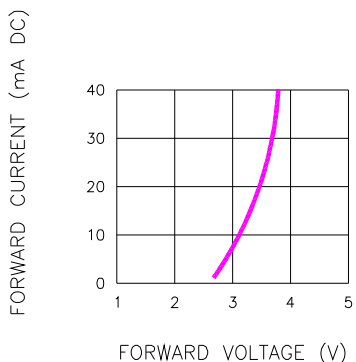


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

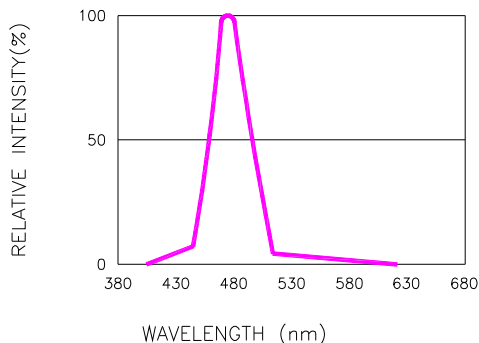


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

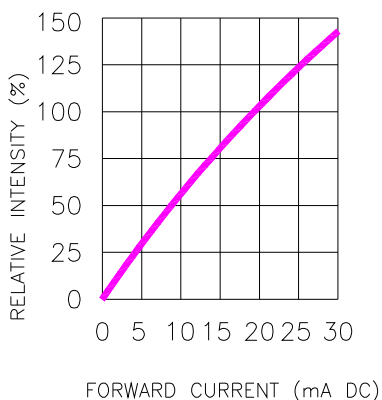


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

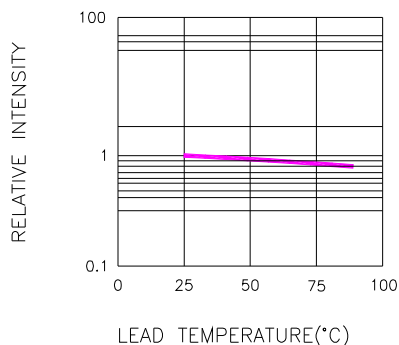


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

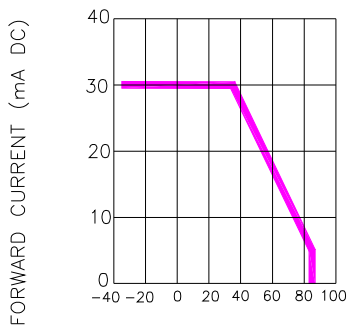


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

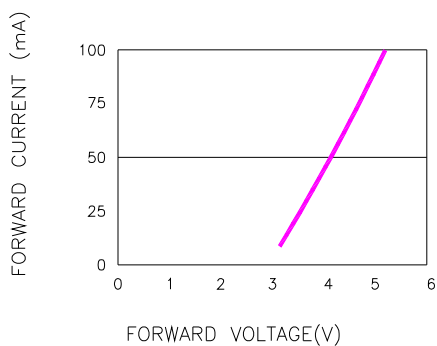


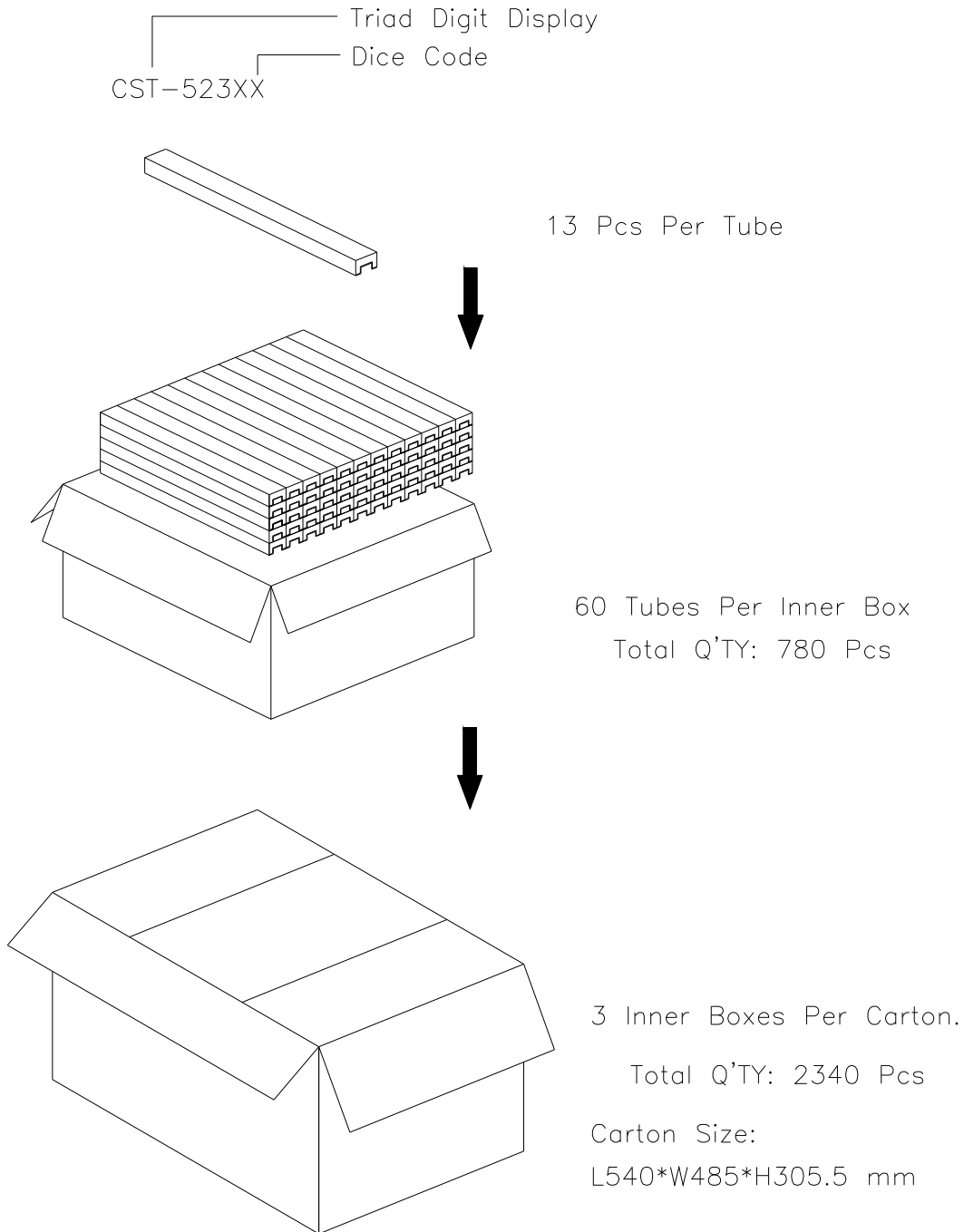
Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD CURRENT  
(100us TEST PULSE, 1% DUTY CYCLE)



|           |               |
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■ Package Dimensions



Note: The specifications are subject to change without notice. Please contact us for updated information.