

# PRODUCT SPECIFICATION

**Model No.: E1-1032CUR1-CT**

| Descriptions & Features:  |
|---|
| <ul style="list-style-type: none"> <li>■ Dot Matrix Display</li> <li>■ Case mold type.</li> <li>■ RoHS compliant.</li> <li>■ Low current operation</li> <li>■ Low power consumption.</li> <li>■ Easy mounting on P.C. board or socket.</li> </ul> |



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

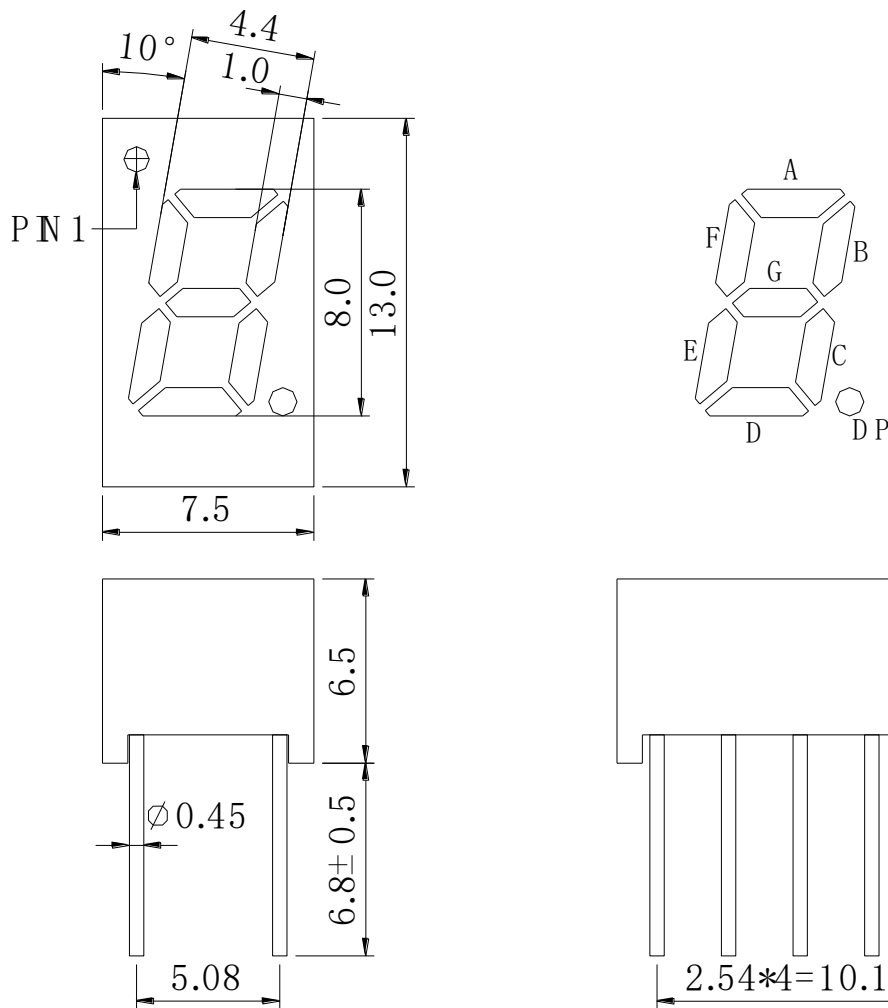
|           |                |
|-----------|----------------|
| Model No. | E1-1032CUR1-CT |
| Rev.      | A              |

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■ -XX: REF Surface / Epoxy color

| Color \ Number    | 0                                 | 1                                      | 2                                     | 3                           | 4                            |
|-------------------|-----------------------------------|--|---------------------------------------|-----------------------------|------------------------------|
| REF Surface Color | <input type="radio"/> White       | <input type="radio"/> Black            | <input checked="" type="radio"/> Gray | <input type="radio"/> Red   | <input type="radio"/> Green  |
| Epoxy Color       | <input type="radio"/> Water Clear | <input checked="" type="radio"/> White | <input type="radio"/> Red             | <input type="radio"/> Green | <input type="radio"/> Yellow |

■ Mechanical Dimensions

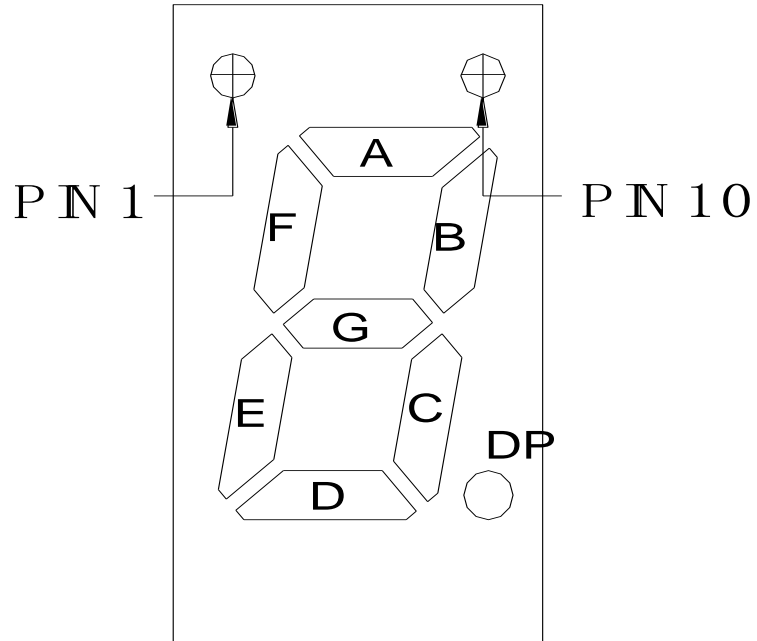


Notes:

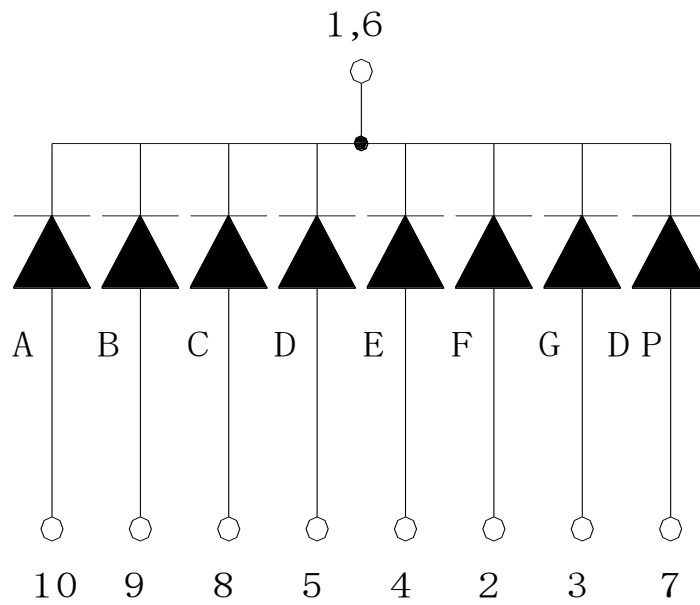
1. All pins are  $\varnothing 0.45$  [0.020]mm
2. Dimension in millimeter [inch], tolerance is  $\pm 0.25$  [.010] and angle is  $\pm 1^\circ$  unless otherwise noted.
3. Bending  $\leq$  Length \* 1%.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

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**■ All Light On Segments Feature & Pin Position**



**■ Internal Circuit Diagrams**



|           |                |
|-----------|----------------|
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**■ Absolute maximum ratings**

(Ta=25°C)

| Parameter             | Symbol | Test Condition  | Value |     | Unit |
|-----------------------|--------|-----------------|-------|-----|------|
|                       |        |                 | Min   | Max |      |
| Reverse Voltage       | VR     | IR=30           | 5     | —   | V    |
| Forward Current       | IF     | —               | —     | 30  | mA   |
| Power Dissipation     | Pd     | —               | —     | 100 | mW   |
| Pulse Current         | Ipeak  | Duty=0.1mS,1KHz | —     | 150 | mA   |
| Operating Temperature | Topr   | —               | -40   | +85 | °C   |
| Storage Temperature   | Tstr   | —               | -40   | +85 | °C   |

**■ Electrical-Optical Characteristics**

● Color Code & Chip Characteristics:(Test Condition:IF=20mA)

(Ta=25°C)

| Emitting Color                                    | Dice Material      | Peak Wave Length( $\lambda_p$ ) | Spectral Line halfwidth( $\Delta\lambda/2$ ) | Forward Voltage(VF)<br>Unit:V |      | Luminous Intensity (Iv)<br>Unit:mcd |          |
|---|--------------------|---------------------------------|--|-------------------------------|------|-------------------------------------|----------|
|   |                    |                                 |  | Typ                           | Max  |                                     |          |
| <b>Standard brightness</b>                        |                    |                                 |  |                               |      |                                     |          |
| PR  | Red                | GaP                             | 700nm  | 90nm                          | 2.00 | 2.50                                | 0.5~1    |
| HR  | Hi Red             | AlGaAs                          | 650nm  | 20nm                          | 1.80 | 2.50                                | 10~15    |
| SR  | Super Red          | AlGaAs                          | 640nm  | 20nm                          | 1.90 | 2.50                                | 20~30    |
| HE  | Orange             | GaAsP                           | 625nm  | 35nm                          | 2.00 | 2.50                                | 10~15    |
| HO  | Amber              | GaAsP                           | 610nm  | 35nm                          | 2.00 | 2.50                                | 10~15    |
| HY  | Yellow             | GaAsP                           | 590nm  | 35nm                          | 2.00 | 2.50                                | 10~15    |
| HG  | Green              | GaP                             | 570nm  | 10nm                          | 2.20 | 2.50                                | 10~15    |
| SB  | Blue               | InGaN                           | 430nm  | 60nm                          | 3.40 | 4.40                                | 4~8(mw)  |
|   |                    |                                 | 460nm  |                               | 3.20 | 3.80                                | 6~12(mw) |
|   |                    |                                 | 470nm  |                               | 3.20 | 3.80                                | 6~12(mw) |
| PG  | Pure Green         | InGaN                           | 520nm  | 36nm                          | 3.00 | 3.80                                | 6~12(mw) |
| SW  | White              | InGaN                           | X=0.29,Y=0.30                                | CCT:9500K                     | 3.20 | 3.80                                | 60~120   |
| <b>Ultra brightness</b>                           |                    |                                 |  |                               |      |                                     |          |
| UR  | Ultra Red          | AlGaInP                         | 635nm  | 20nm                          | 1.90 | 2.50                                | 30~60    |
| UE  | Ultra Orange       | AlGaInP                         | 625nm  | 20nm                          | 1.80 | 2.30                                | 60~120   |
| UO  | Ultra Amber        | AlGaInP                         | 610nm  | 20nm                          | 1.90 | 2.50                                | 60~120   |
| UY  | Ultra Yellow       | AlGaInP                         | 590nm  | 20nm                          | 1.90 | 2.50                                | 60~120   |
| UG  | Ultra Green        | AlGaInP                         | 570nm  | 30nm                          | 1.80 | 2.30                                | 30~60    |
| PG  | Ultra Pure Green   | InGaN                           | 520nm  | 36nm                          | 3.00 | 3.80                                | 180~300  |
| BG  | Ultra Bluish Green | InGaN                           | 505nm  | 36nm                          | 3.00 | 3.80                                | 180~300  |
| UB  | Ultra Blue         | InGaN                           | 460nm  | 30nm                          | 3.20 | 3.80                                | 60~120   |
|   |                    |                                 | 470nm  | 30nm                          | 3.20 | 3.80                                | 60~120   |
| UW  | Ultra White        | InGaN                           | X=0.29,Y=0.30                                | CCT:9500K                     | 3.20 | 3.80                                | 120~200  |
| Segment-to-Segment Luminous Intensity ratio(Iv-M) |                    |                                 |  | 1.5:1                         |      |                                     |          |

Note:

- 1.Luminous Intensity is based on the Long Da standards.
- 2.Pay attention about static for InGaN