



# PRODUCT SPECIFICATION

**Model No.: CSDS-2D100A**

Descriptions:
<ul style="list-style-type: none"> <li>■ 2.3 Inch Single Digit Display</li> <li>■ Common Anode</li> <li>■ Emitting Color: Super Bright Amber</li> <li>■ Black Face</li> <li>■ White Segment</li> </ul>



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Spec. No.	PS-DS-2D100A
Rev.	A

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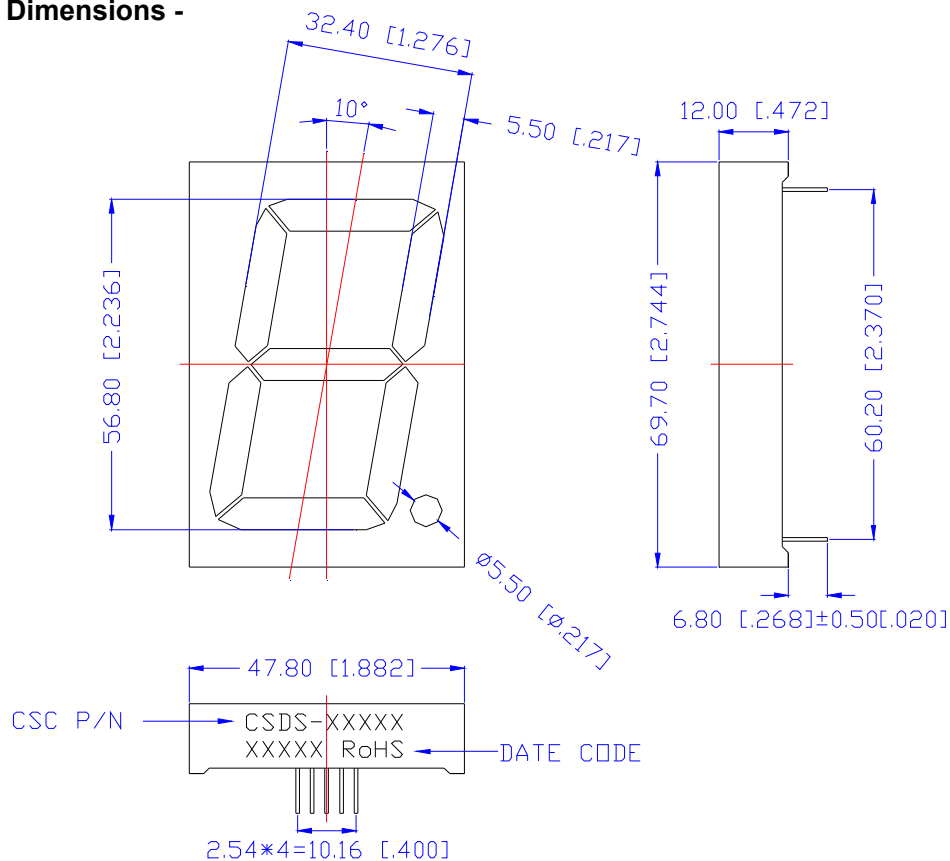
**Features -**

1. 2.3 inch (56.80mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Standard: black face, white segment.
6. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Model No.	Chip		Description
	Material	Emitting Color	
CSDS-2D100A	AlGaInP	Super Bright Amber	Common Anode

**Mechanical Dimensions -**



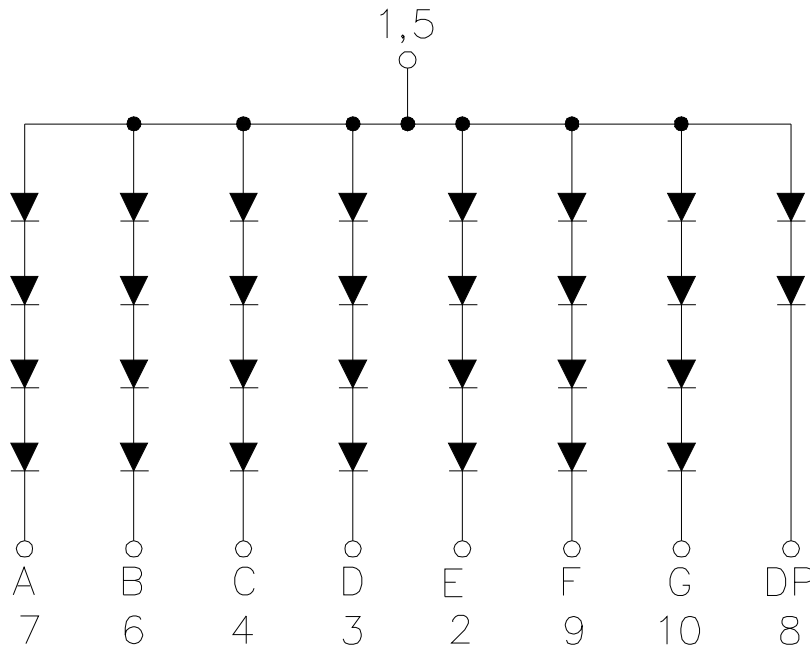
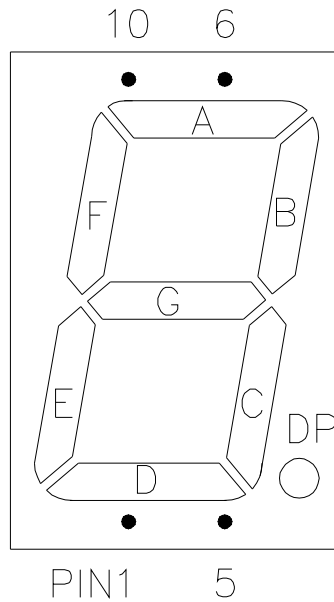
**Notes:**

1. All pins are  $\varnothing 0.60$  [0.024]
2. Dimension in millimeter [inch], tolerance is  $\pm 0.25$  [0.010] and angle is  $\pm 1^\circ$  unless otherwise noted.
3. Bending  $\leq$  Length \* 1%.



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Internal Circuit Diagrams -





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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>P<sub>AD</sub></b>	70	mW
Derating Liner from 25°C per Dice	-	0.33	mA/°C
Continuous Forward Current Per Dice	<b>I<sub>AF</sub></b>	25	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	<b>I<sub>PF</sub></b>	90	mA
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

■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment(DP)	<b>V<sub>F</sub></b>	-	8.0(4.0)	11.2(5.6)	V	I <sub>F</sub> =20mA
Luminous Intensity Per Segment	<b>I<sub>v</sub></b>	94	280	-	mcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	<b>λ<sub>P</sub></b>	-	612	-	nm	I <sub>F</sub> =20mA
Dominant Wavelength	<b>λ<sub>d</sub></b>	-	606	-	nm	I <sub>F</sub> =20mA
Spectrum Radiation Bandwidth	<b>Δ λ</b>	-	20	-	nm	I <sub>F</sub> =20mA
Reverse Current(DP)	<b>I<sub>R</sub></b>	-	-	100	μA	VR=20V(10V)
Luminous Intensity Matching Ratio	<b>IV-m</b>	-	-	2:1	-	I <sub>F</sub> =10mA



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

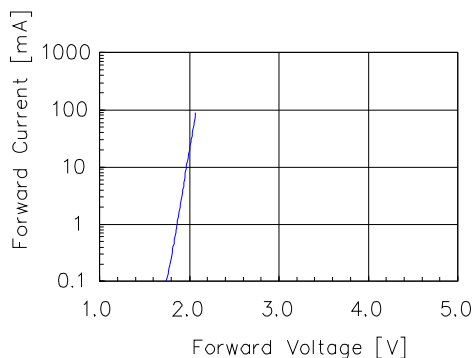


Fig 1. Forward Current vs. Forward Voltage

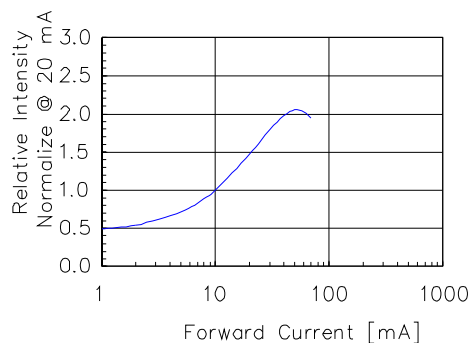


Fig 2. Relative Intensity vs. Forward Current

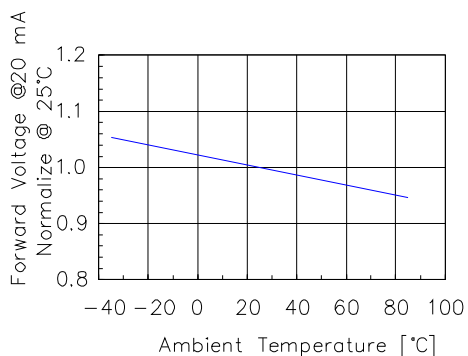


Fig 3. Forward Voltage vs. Temperature

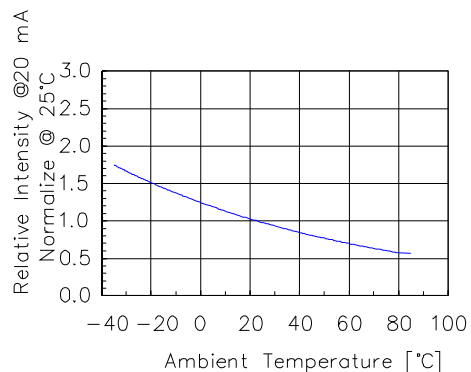


Fig 4. Relative Intensity vs. Temperature

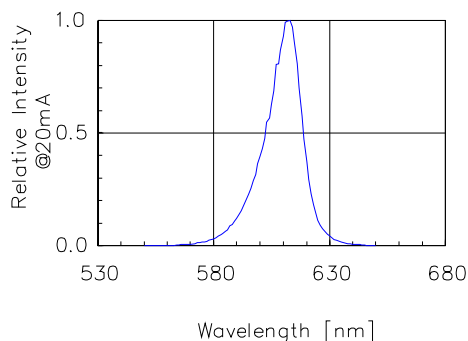


Fig 5. Relative Intensity vs. Wavelength

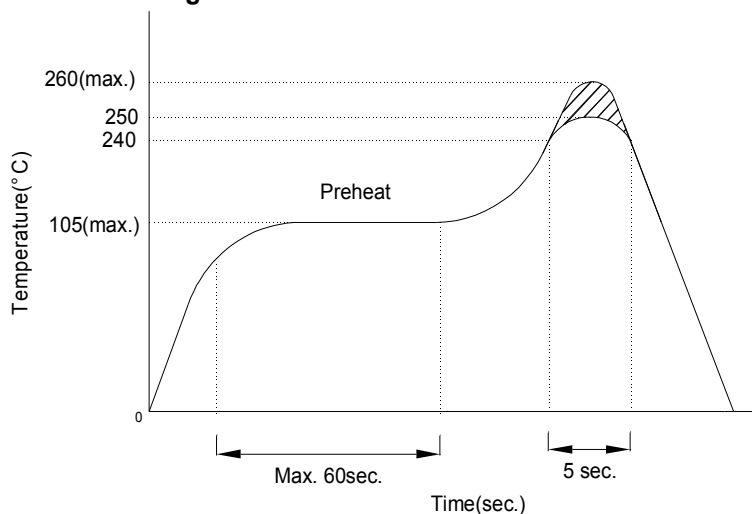


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## ■ Precautions For Use -

### 1. Recommended Soldering conditions

#### Wave Soldering



### 2. Soldering Iron

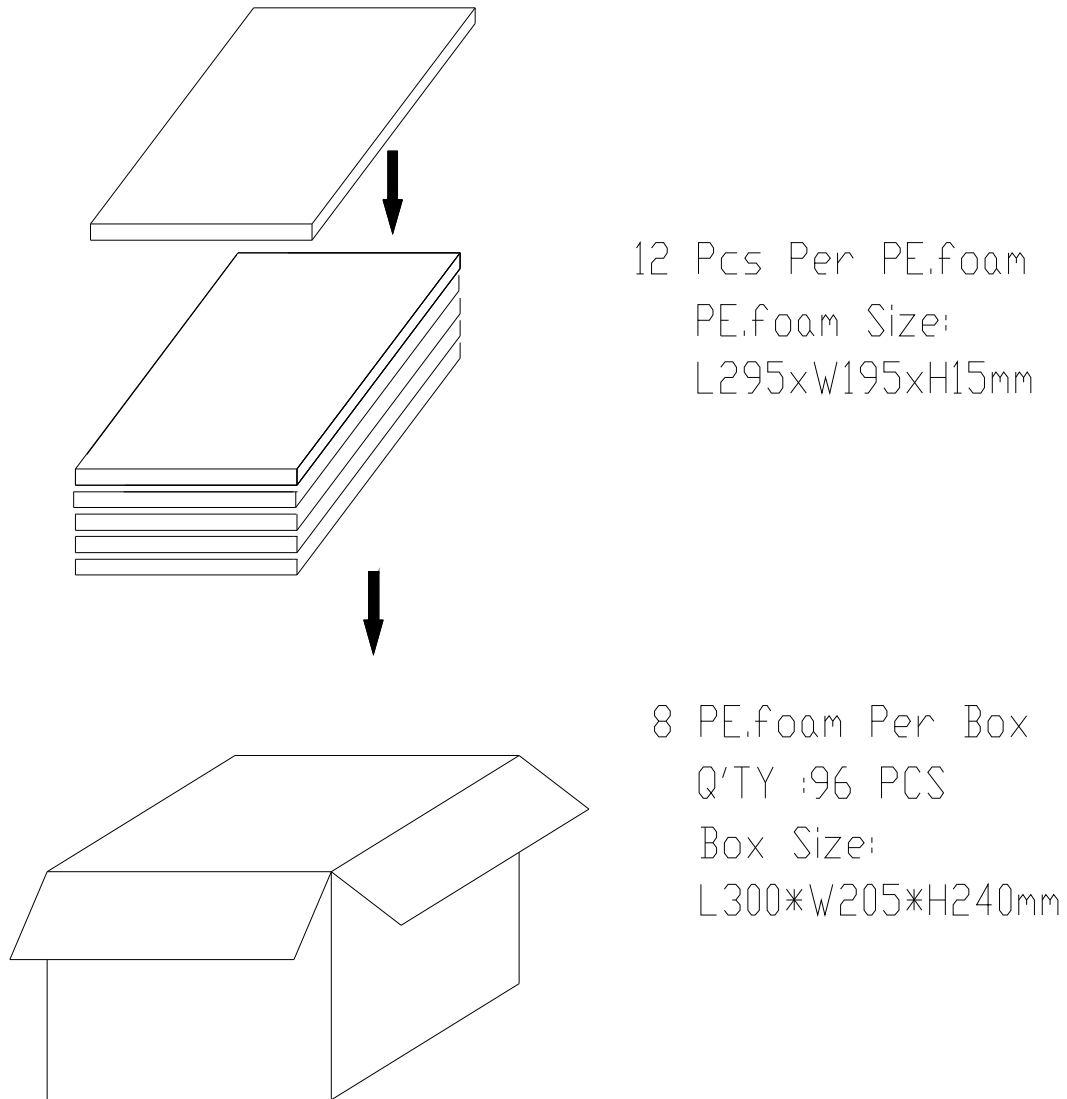
Basic SPEC. is  $\leq 5$ sec. When  $260^{\circ}\text{C}$ . If temperature is higher, time should be shorter ( $+10^{\circ}\text{C} \rightarrow -1$ sec.). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under  $230^{\circ}\text{C}$ .



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### ■ Package Dimensions



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