



Spec. No.	PS-ND-0807
Rev.	A

# PRODUCT SPECIFICATION

**Model No : CSS-2314S/2315S**

## Descriptions:

- 2.30 Inch Single Digit Display
- Emitting Color : Super Bright Red



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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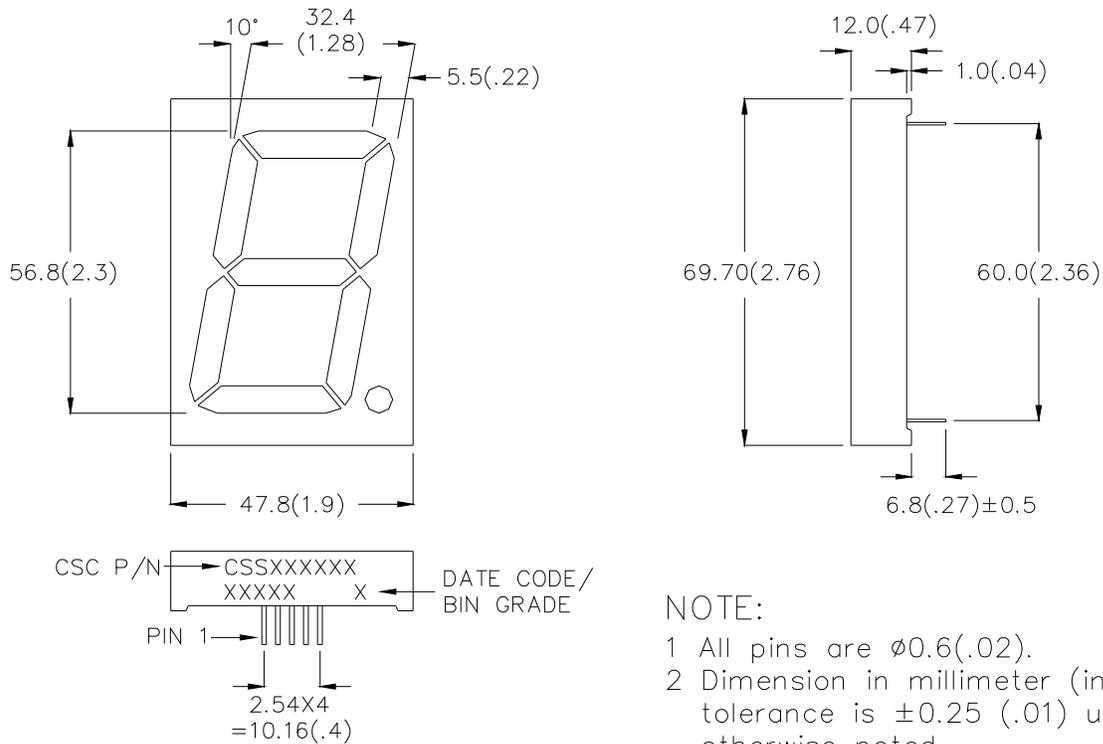
**Features -**

1. 2.30 inch (56.8mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Part No.	Chip		Description
	Material	Emitted Color	
<b>CSS-2314S</b>	<b>AlGaAs</b>	<b>Super Bright Red</b>	<b>Common Anode</b>
<b>CSS-2315S</b>	<b>AlGaAs</b>	<b>Super Bright Red</b>	<b>Common Cathode</b>

**Mechanical Dimensions -**



**NOTE:**

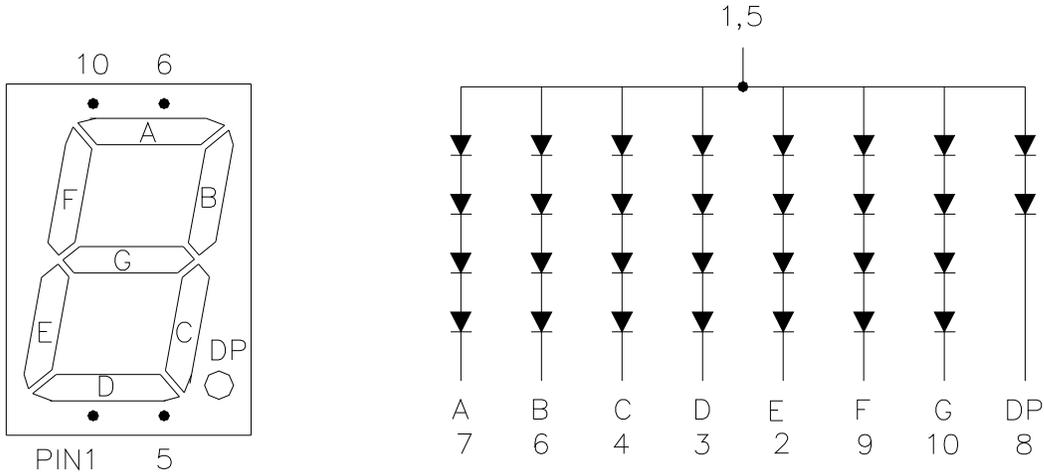
- 1 All pins are  $\phi 0.6 (.02)$ .
- 2 Dimension in millimeter (inch), and tolerance is  $\pm 0.25 (.01)$  unless otherwise noted.



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**Internal Circuit Diagrams -**



**CSS-2318 Common Anode  
(CSS-2319 Common Cathode.)**

**Absolute Maximum Rating -**

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	75	mW
Continuous Forward Current Per Dice	IAF	30	mA
Peak Current Per Dice(duty cycle 1/10, 1KHz)	IPF	120	mA
Continuous Forward Current Per Dice	-	0.42	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temperature	Topr	-35 ~ +85	°C
Storage Temperature	Tstg	-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 (DP)	VF	-	7.2(3.6)	10(5.0)	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	35	-	mcd	IF=10mA
Peak Emission Wavelength	$\lambda P$	-	660	-	nm	IF=20mA
Dominant Wavelength	$\lambda d$	-	644	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=12V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	IF=10mA



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**Typical Electrical / Optical Characteristics Curves -**

**(Ta = 25°C Unless Otherwise Noted)**

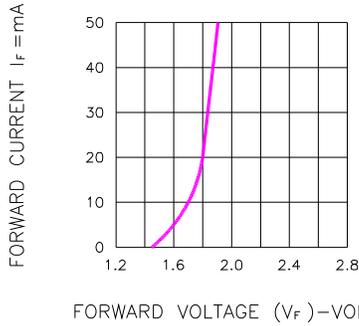


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

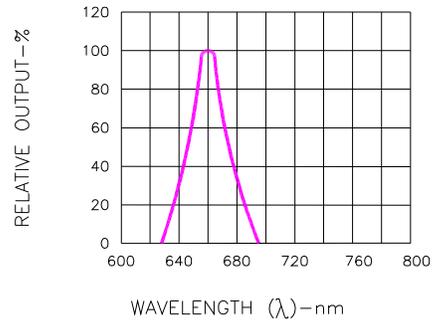


Fig.2 SPECTRAL RESPONSE

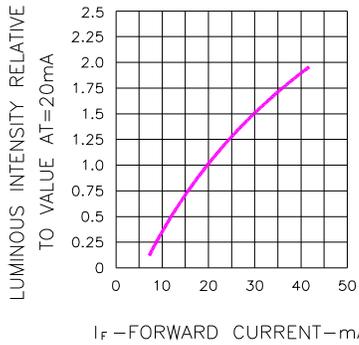


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

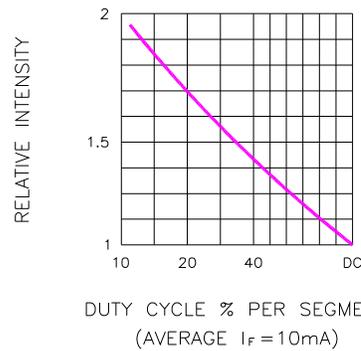


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

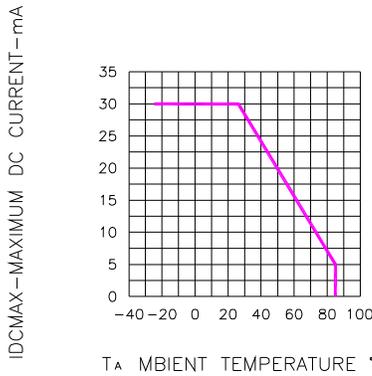


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

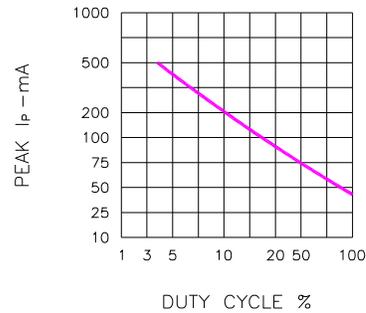


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

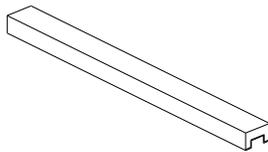


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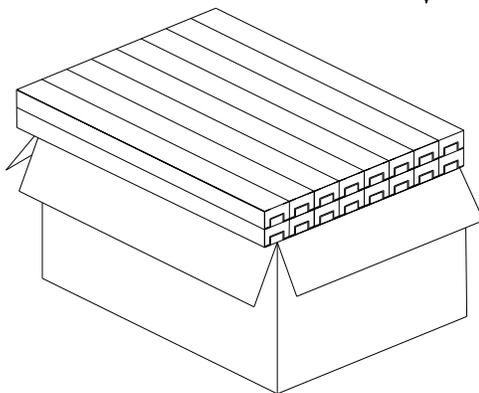
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**■ Package Dimensions**

CSS-231XX      Single Digit Display  
Dice Code

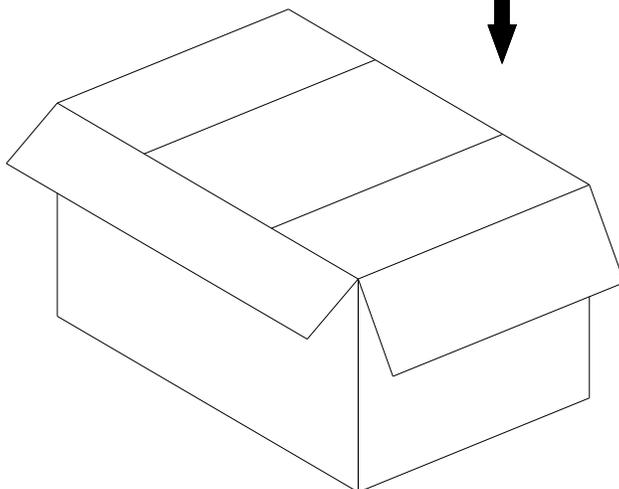


10 PCS per tube



16 Tubes per inner box

Total Q'TY: 160 pcs



3 Inner boxes per carton.

Total Q'TY: 480 pcs

**Carton Size:  
L54xW48.5xH30.5cm**

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

<http://www.csctw.com.tw>