



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

# PRODUCT SPECIFICATION

**Model No : CSS-816E/815E**

## Descriptions:

- 0.80 Inch Single Digit Display
- Emitting Color : Orange



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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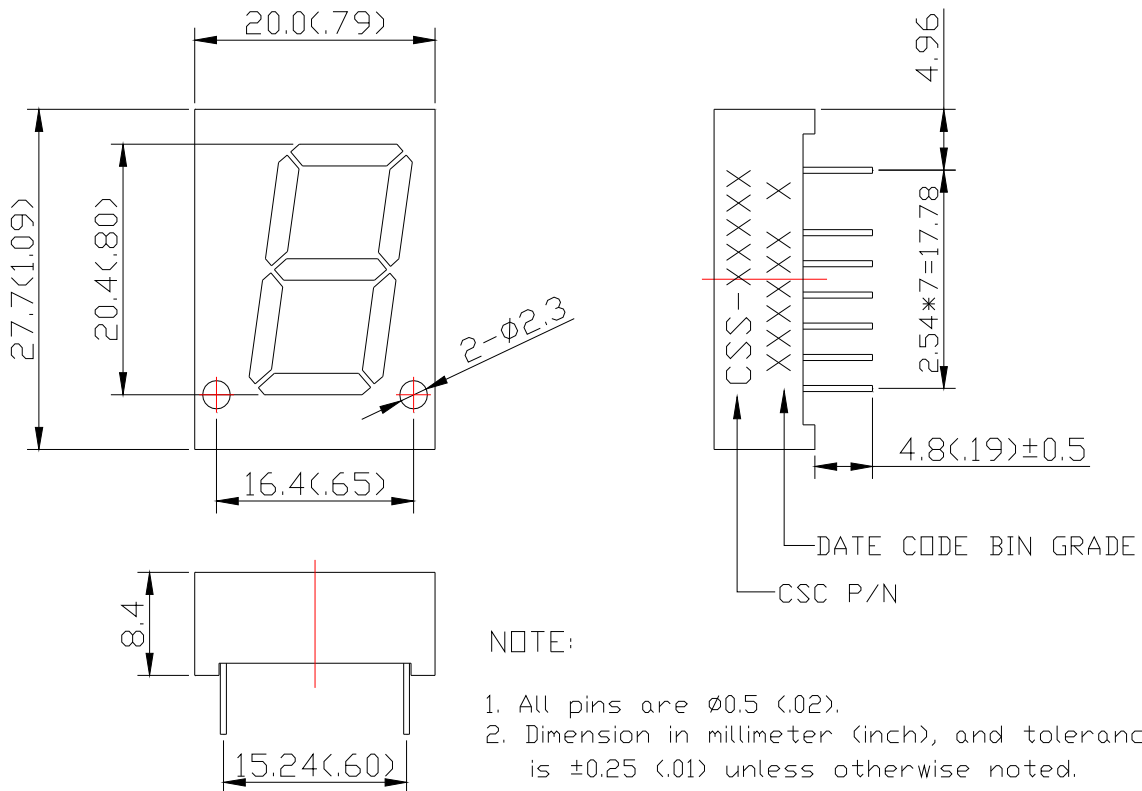
**Features -**

1. 0.80 inch (20.4mm) 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 -**

Model No.	Chip		Description
	Material	Emitted Color	
<b>CSS-816E</b>	<b>GaAsP</b>	<b>Orange</b>	<b>Common Anode</b>
<b>CSS-815E</b>	<b>GaAsP</b>	<b>Orange</b>	<b>Common Cathode</b>

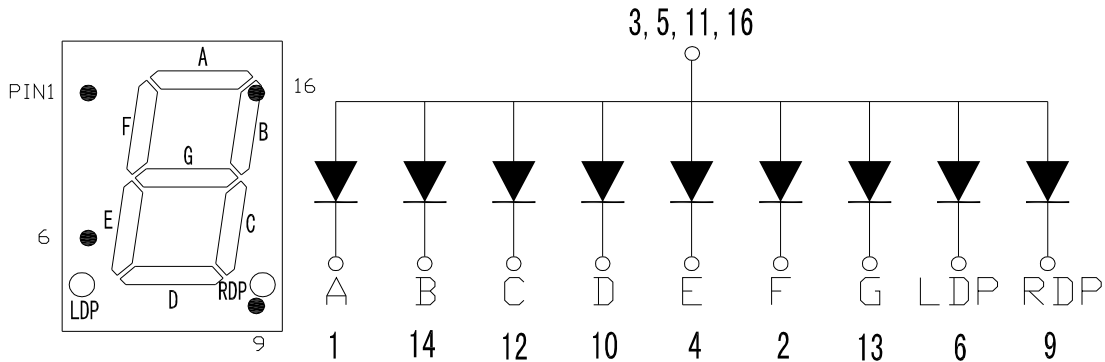
**Mechanical Dimensions -**





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Internal Circuit Diagrams -



NO. 7,8,15 No PIN

CSS-816 Common Anode  
(CSS-815 Common Cathode.)

Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	70	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice	IPF	90	mA
Continuous Forward Current Per Dice	-	0.33	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 °			



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■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	VF	-	2.0	2.8	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	4	-	mcd	IF=10mA
Peak Emission Wavelength	$\lambda P$	-	632	-	nm	IF=20mA
Dominant Wavelength	$\lambda d$	-	624	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	35	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	IF=20mA



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**Typical Electrical / Optical Characteristics Curves -**

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

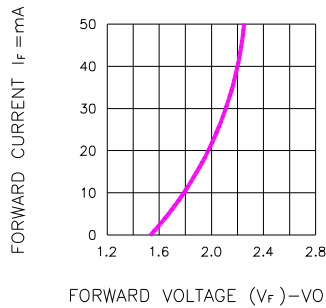


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

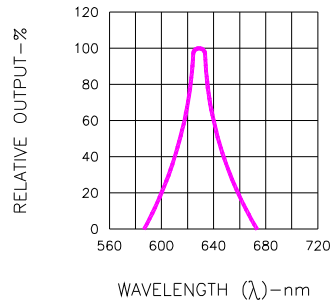


Fig.2 SPECTRAL RESPONSE

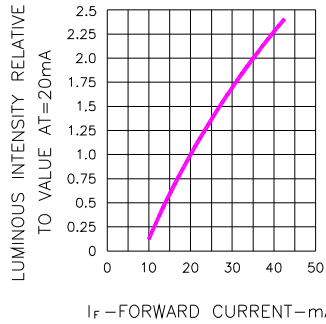


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

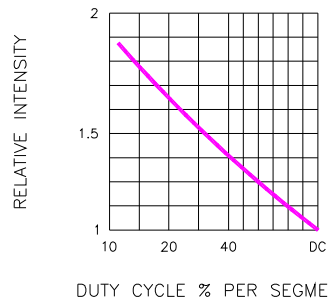


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

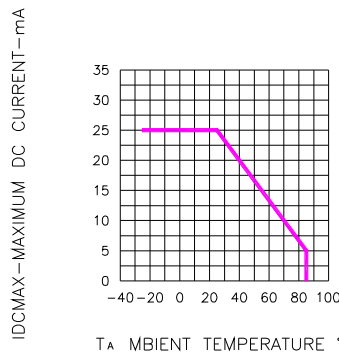


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. AMBIENT TEMPERATURE

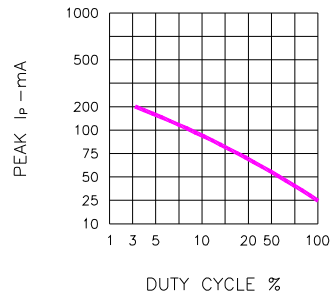


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE (REFRESH RATE f=1 KHz)

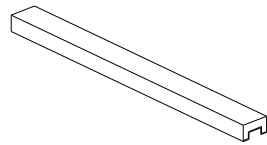


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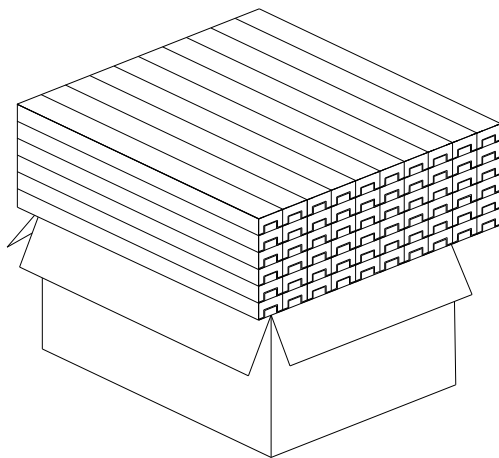
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■ Package Dimensions

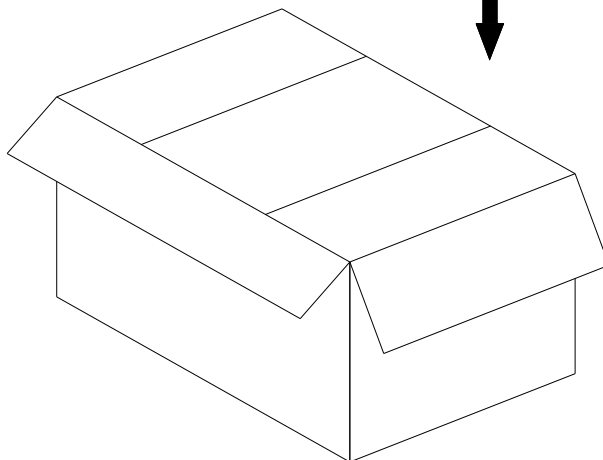
Single Digit Display  
Dice Code  
CSS-81XX



18 PCS per tube



60 Tubes per inner box  
Total Q'TY: 1080 pcs



3 Inner boxes per carton.  
Total Q'TY: 3240 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>