



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

# PRODUCT SPECIFICATION

**Model No : CSS-514B7/515B7**

## Descriptions:

- 0.56 Inch Single Digit Display
- Emitting Color : Super Bright Blue



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
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**Model No : CSS-514B7/515B7**

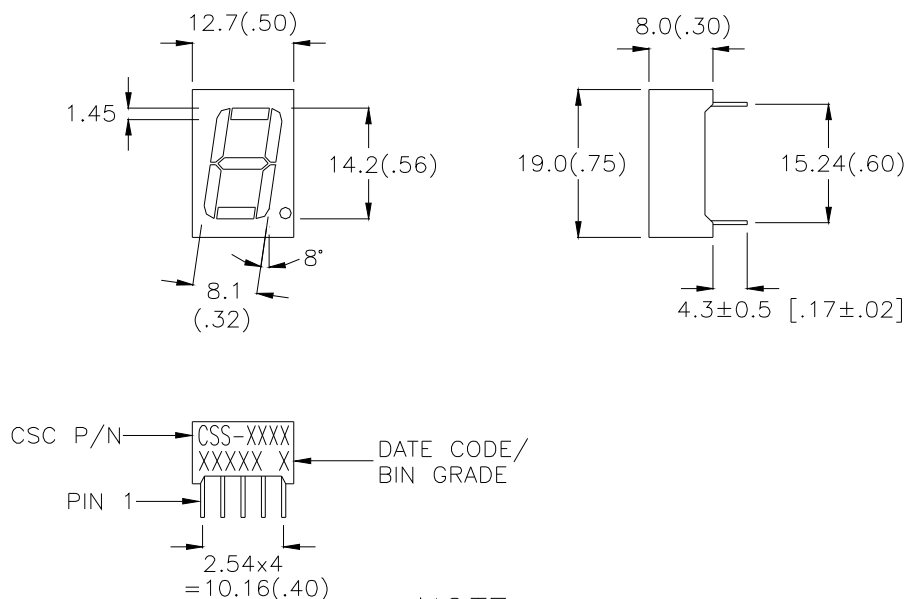
**■ Features -**

1. 0.56 inch (14.2mm) 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	
<b>CSS-514B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Anode</b>
<b>CSS-515B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Cathode</b>

**■ Mechanical Dimensions -**



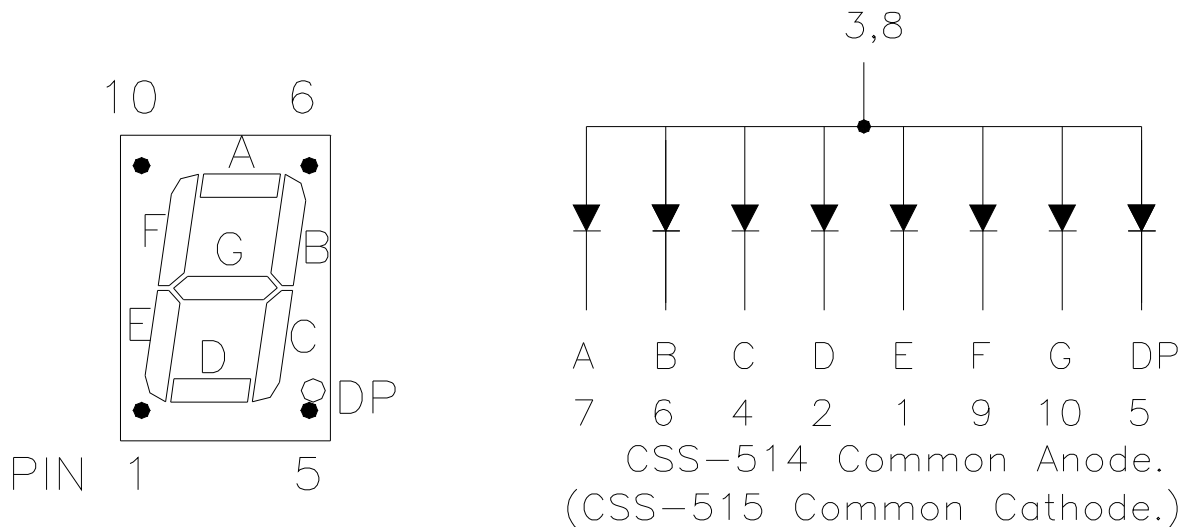
**NOTE:**

1. All Pins are  $\phi 0.5(.02)$ .
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	Pd	120	mW
Continuous Forward Current Per Dice	IAF	30	mA
Peak Current Per Dice	IPF	100	mA
Derating Linear From 25°C Per Dice	-	0.4	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	VF	-	3.5	4	V	IF=20mA
Luminous Intensity Per Segment	Iv	6400	16000	-	ucd	IF=10mA
Peak Emission Wavelength	$\lambda P$	-	468	-	nm	IF=20mA
Dominant Wavelength	$\lambda d$	-	470	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=5V
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)

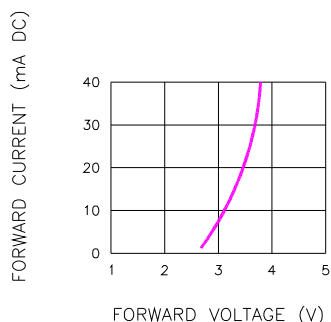


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

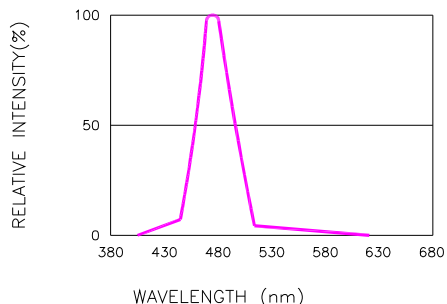


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

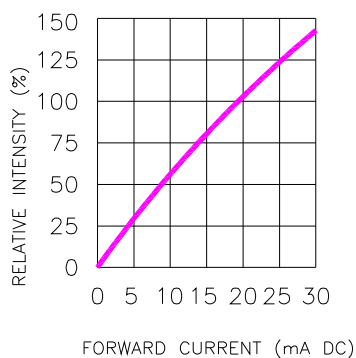


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

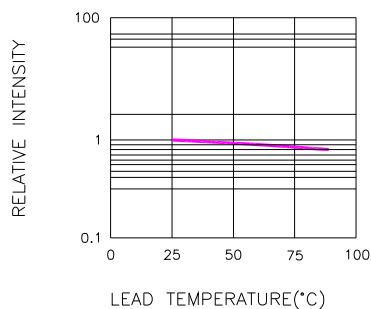


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us  
PULSE, 10ms PERIOD)

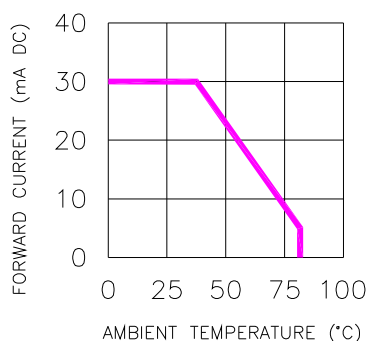


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

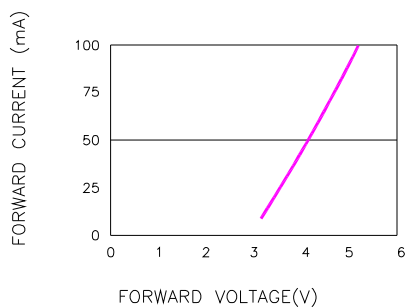


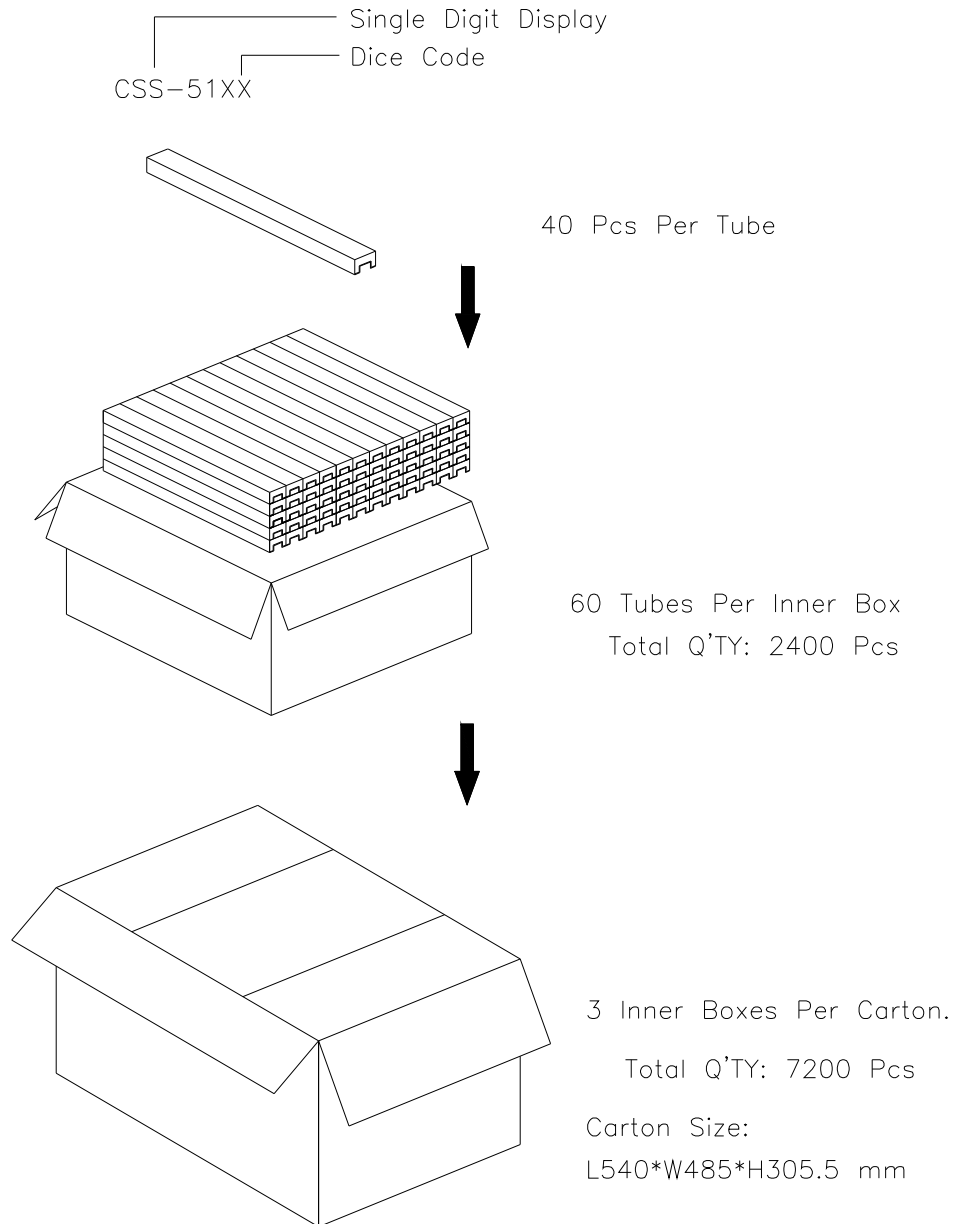
Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE,  
1% DUTY CYCLE)



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■ Package Dimensions



Note: The specifications are subject to change without notice. Please contact us for updated information.  
<http://www.csctw.com.tw>