



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

# PRODUCT SPECIFICATION

**Model No : CSS-4310B7/4311B7**

## Descriptions:

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



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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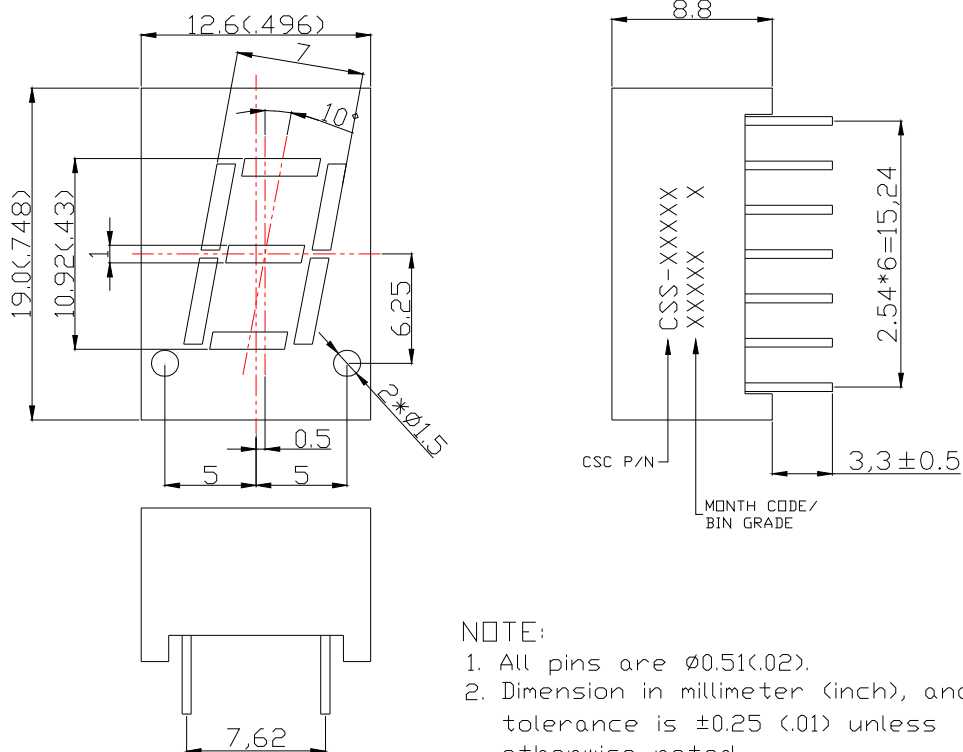
**Features -**

1. 0.43 inch (10.92mm) 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 -**

Model No.	Chip		Description
	Material	Emitted Color	
<b>CSS-4310B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Anode</b>
<b>CSS-4311B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Cathode</b>

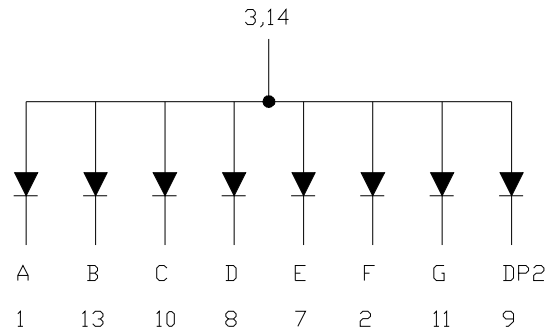
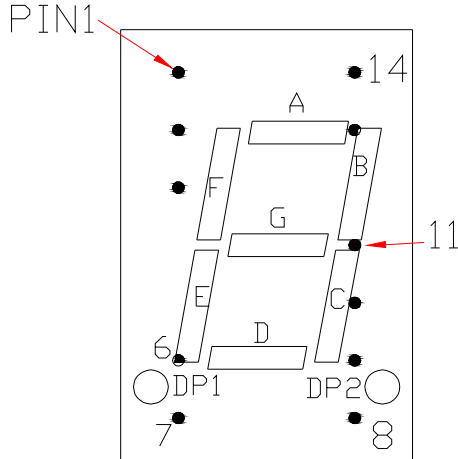
**Mechanical Dimensions -**





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Internal Circuit Diagrams -



4 . 5 . 12 NO PIN  
DP1 NO CHIP  
CSS-4310 Common Anode.  
(CSS-4311 Common Cathode).

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	V <sub>F</sub>	-	3.5	4	V	I <sub>F</sub> =20mA
Luminous Intensity Per Segment	I <sub>v</sub>	6400	16000	-	ucd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>P</sub>	-	468	-	nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	-	470	-	nm	I <sub>F</sub> =20mA
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-	-	100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	I <sub>V-m</sub>	-	-	2:1	-	I <sub>F</sub> =10mA



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

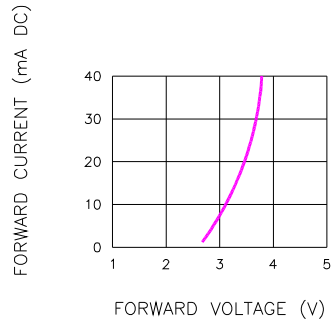


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

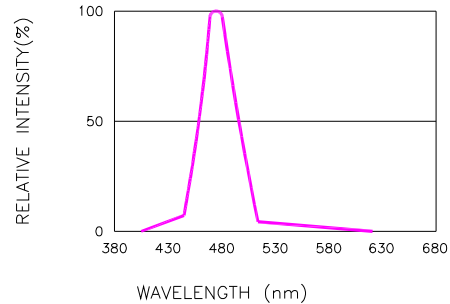


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

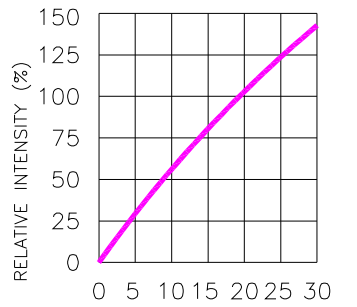


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

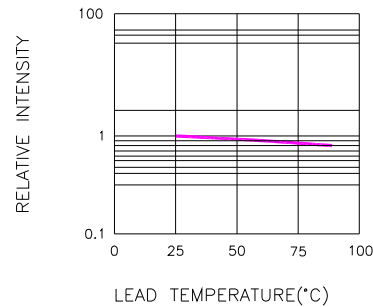


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

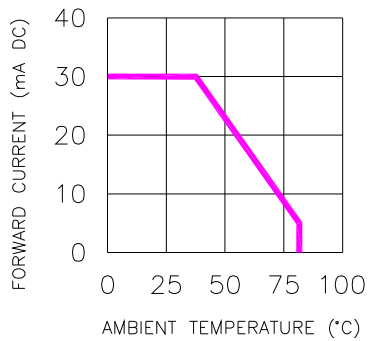


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

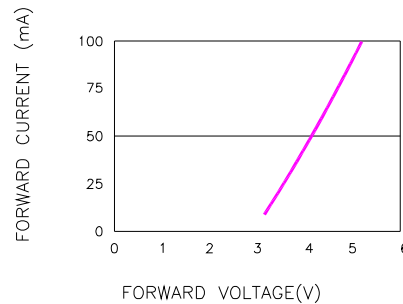


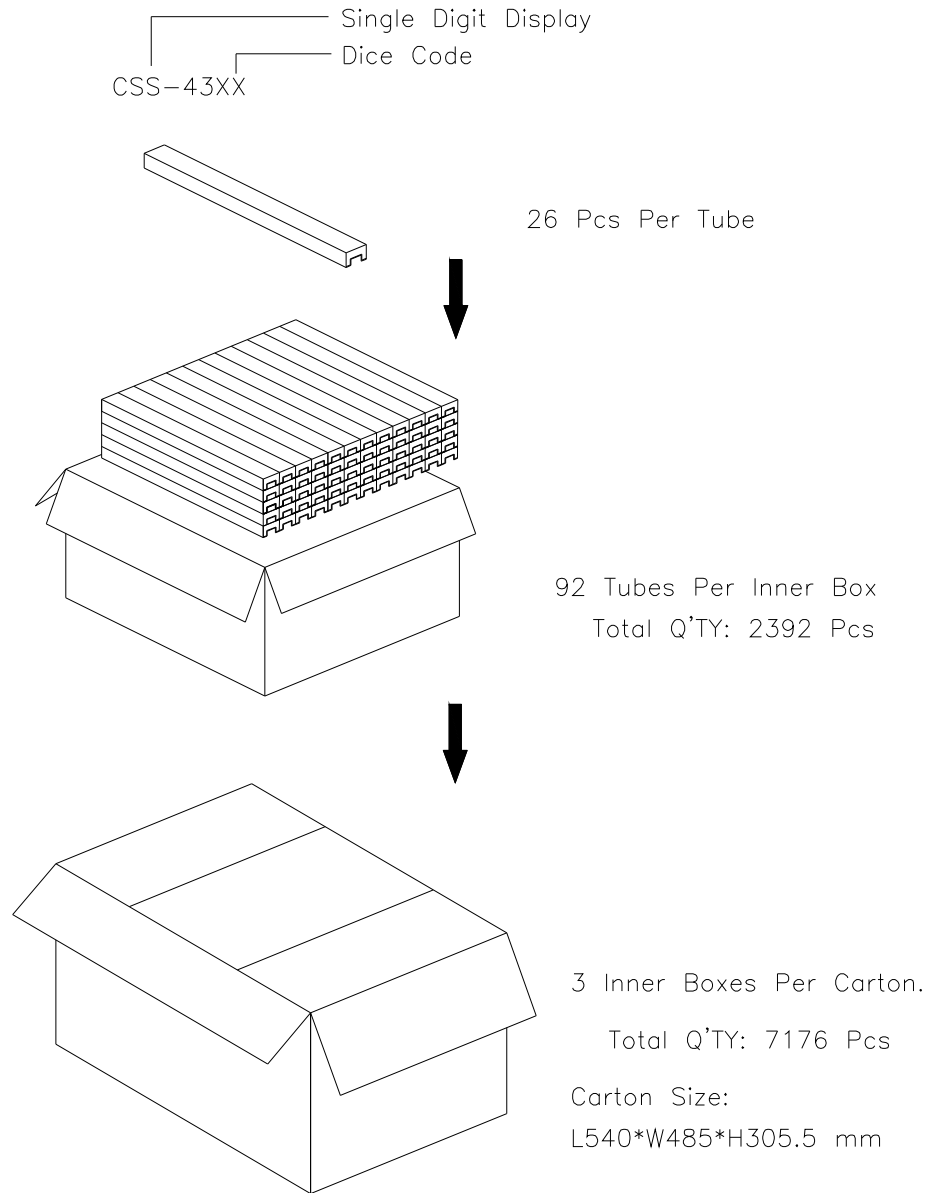
Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD(100us TEST PULSE, 1% DUTY CYCLE)



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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>