



Spec. No.	PS-ND-0711
Rev.	A

# PRODUCT SPECIFICATION

**Model No : CSS-1018B7/1019B7**

## Descriptions:

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



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

**CHINA SEMICONDUCTOR CORPORATION**  
Address:2FL. NO.909,Chung-Cheng Road,  
Chung-Ho City Taipei Hsien,Taiwan.

Tel:886-2-2223-9696  
Fax:886-2-2223-9377

**OPTO PLUS TECHNOLOGIES CO.,LTD**  
Address:696 Shun jiang Rd.,Ji Shan St.Shaoxing,  
ZheJiang,China

Tel:86-0575-8623888  
Fax:86-0575-8623112



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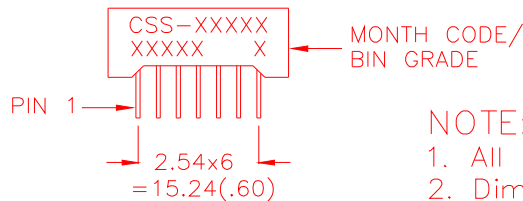
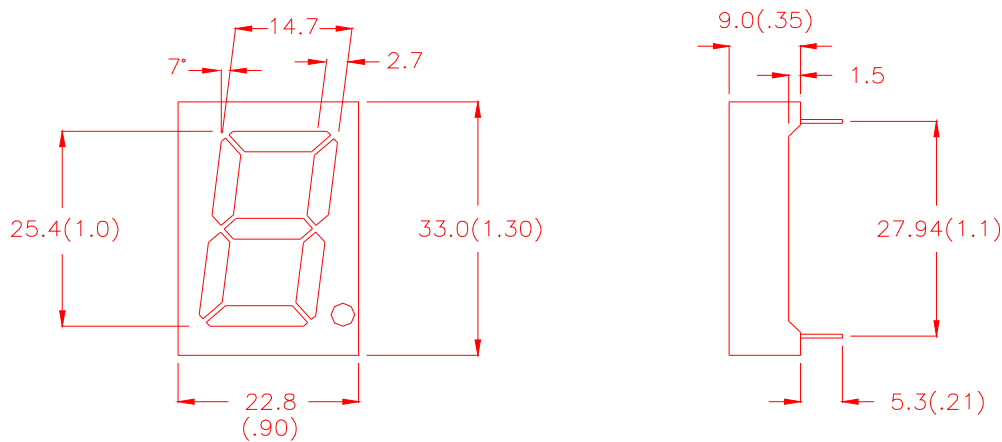
**Features -**

1. 1.0 inch (25.4mm) 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-1018B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Anode</b>
<b>CSS-1019B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Common Cathode</b>

**Mechanical Dimensions -**



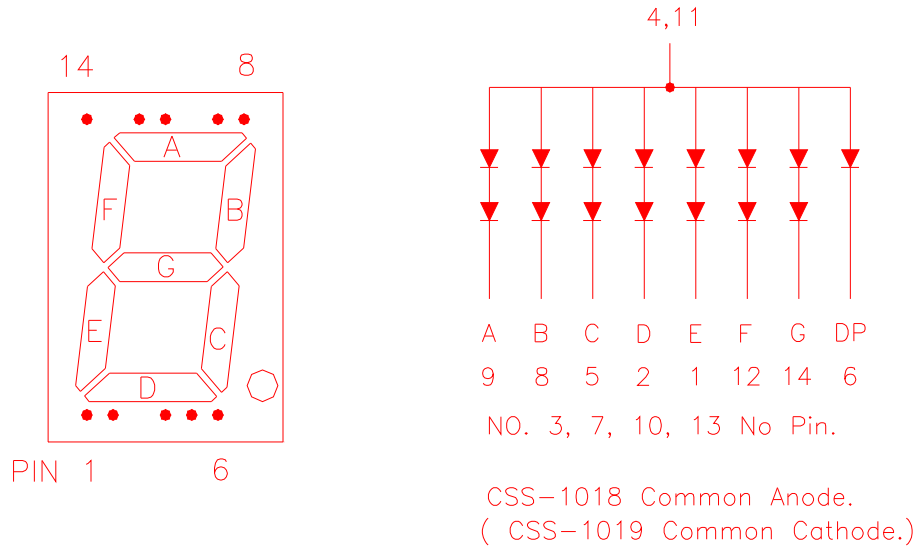
**NOTE:**

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 (Duty cycle 1/10, 1KHz)	IPF	100	mA
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(3.5)	8(4.0)	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	30	-	mcd	
Peak Emission Wavelength	$\lambda P$	-	470	-	nm	
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	
Reverse Current	IR	-	-	50	$\mu A$	VR=10V



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**Typical Electrical / Optical Characteristics Curves -**

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

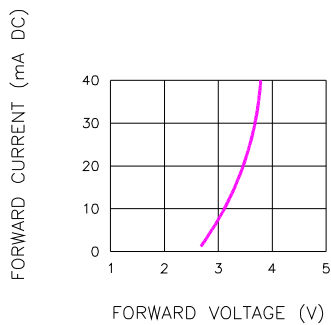


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

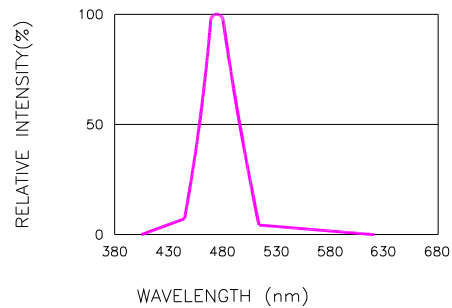


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

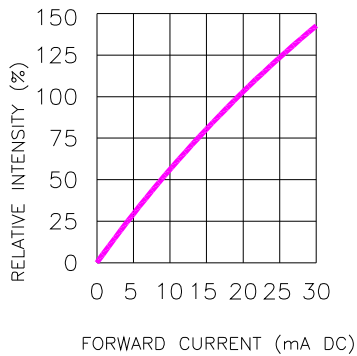


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

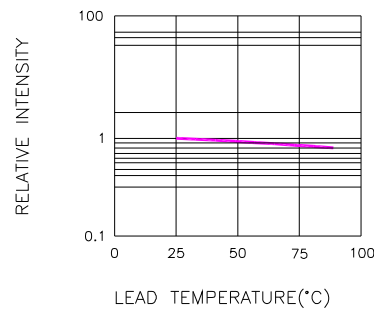


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

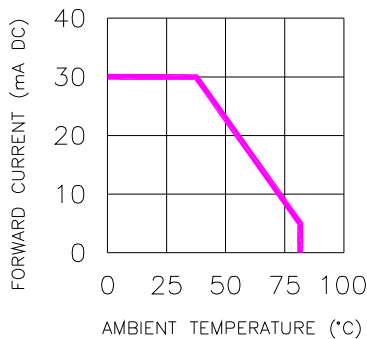


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

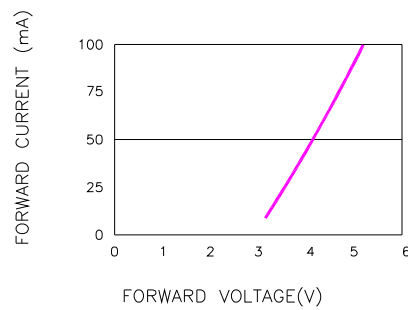


Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)

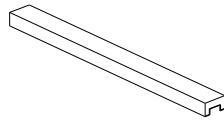


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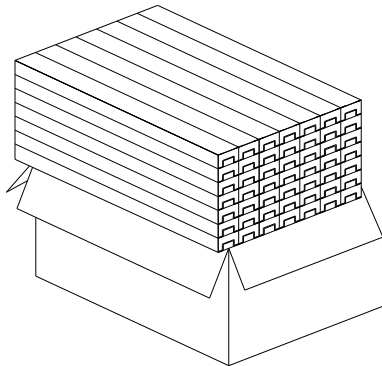
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■ Package Dimensions

Single Digit Display  
Dice Code  
CSS-101XX

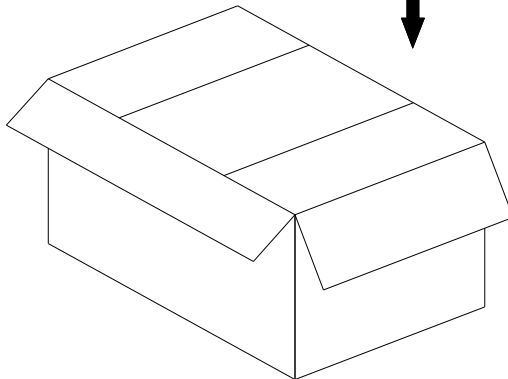


20 PCS per tube



49 Tubes per inner box

Total Q'TY: 980 pcs



3 Inner boxes per carton.

Total Q'TY: 2940 pcs

Box size:  
L54xW48.5xH30.5cm

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