



CHINA
SEMICONDUCTOR
CORPORATION

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

PRODUCT SPECIFICATION

Model No : CSS-314B7/315B7

Descriptions:

- 0.30 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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Model No : CSS-314B7/315B7

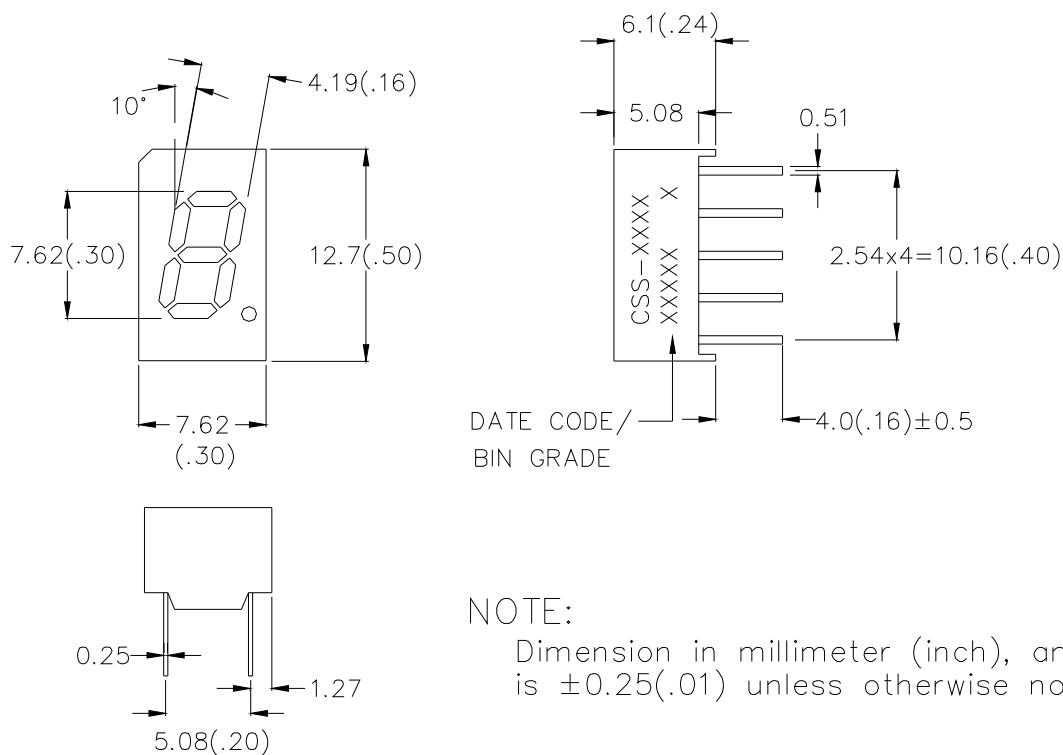
■ **Features -**

1. 0.30 inch (7.8mm) 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	
CSS-314B7	InGaN	Super Bright Blue	Common Anode
CSS-315B7	InGaN	Super Bright Blue	Common Cathode

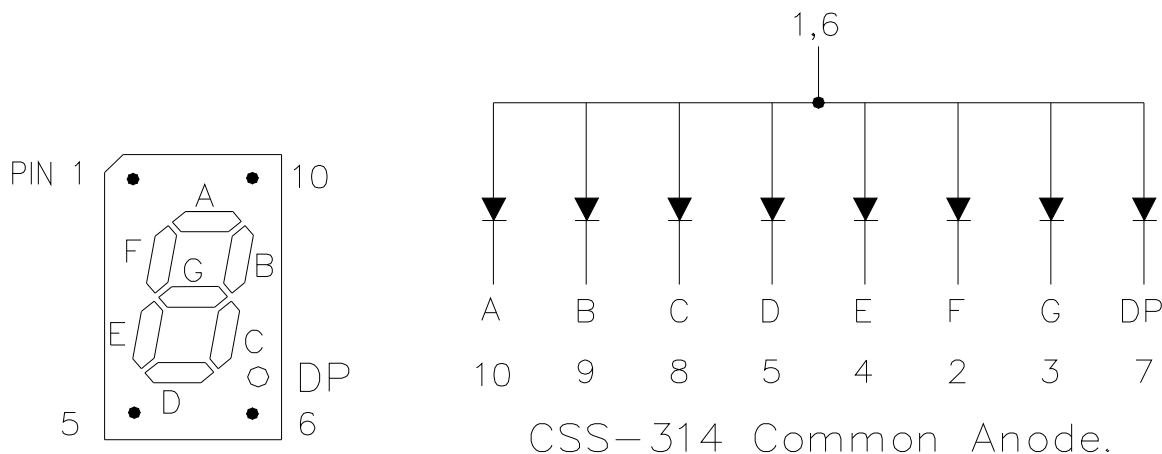
■ **Mechanical Dimensions -**





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■ Internal Circuit Diagrams -



(CSS-315 is 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	VF	-	3.5	4	V	IF=20mA
Luminous Intensity Per Segment	Iv	6400	16000	-	ucd	IF=10mA
Peak Emission Wavelength	λP	-	468	-	nm	IF=20mA
Dominant Wavelength	λd	-	470	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	μA	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)

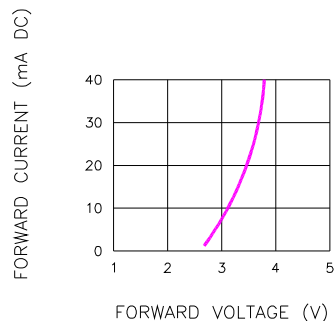


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

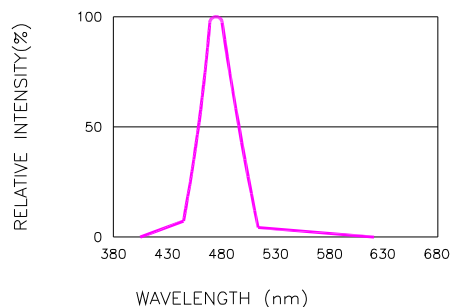


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

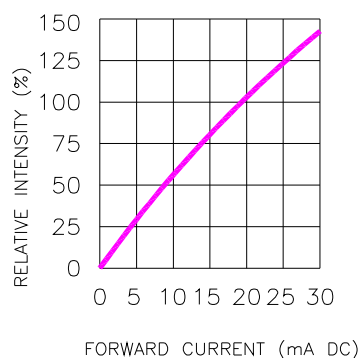


Fig.3 RELATIVE INTENSITY
VS. FORWARD CURRENT

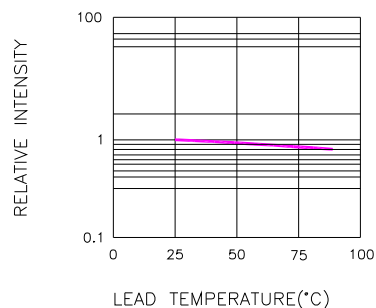


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us
PULSE, 10ms PERIOD)

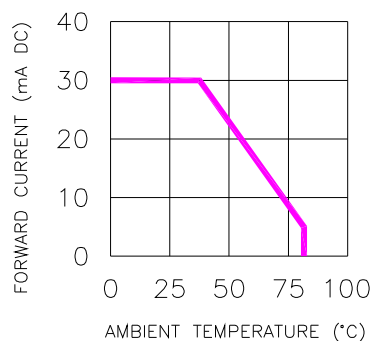


Fig.5 FORWARD CURRENT
VS. AMBIENT TEMPERATURE

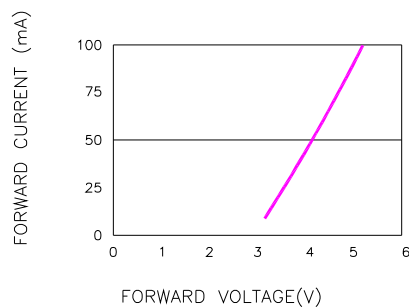
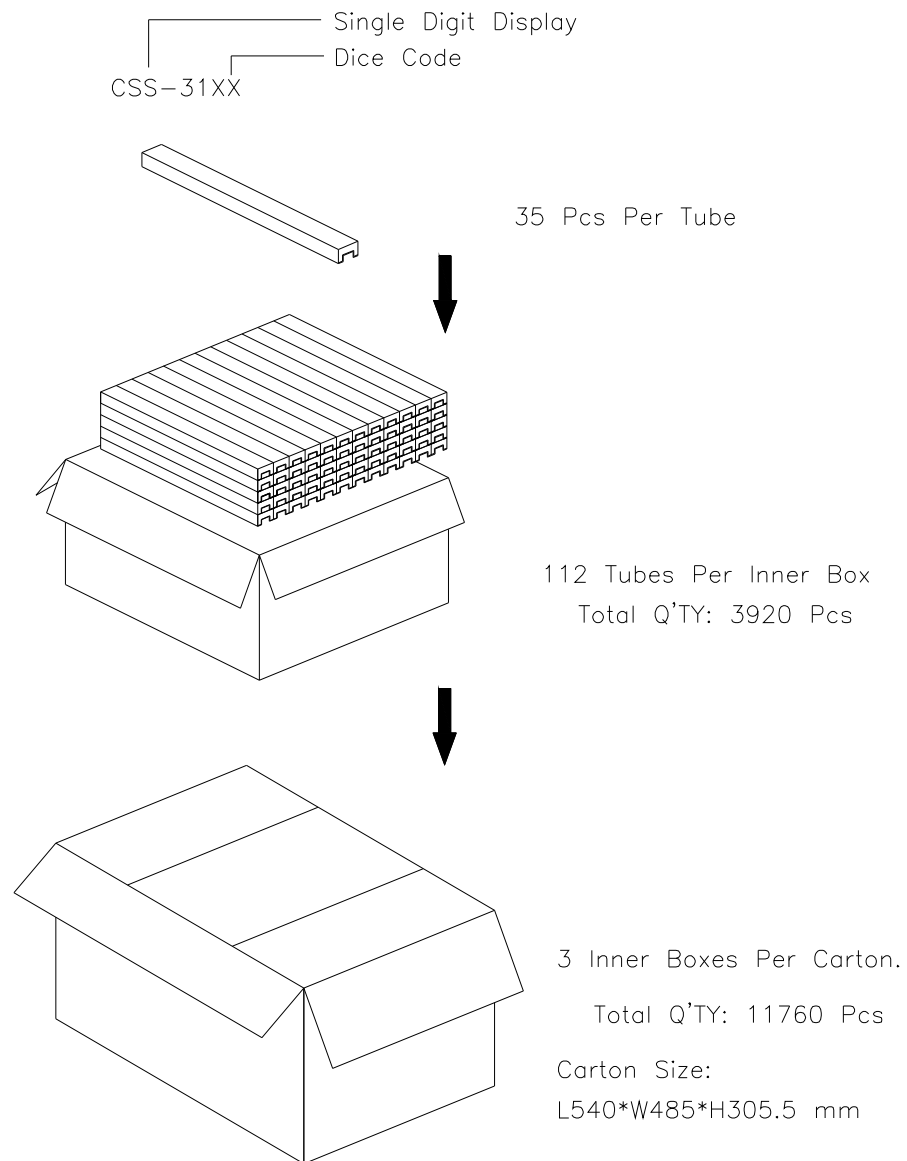


Fig.6 PEAK FORWARD VOLTAGE
VS. FORWARD(100us TEST PULSE,
1% DUTY CYCLE)



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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>