CHINA
SEMICONDUCTOR
CORPORATION

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

PRODUCT SPECIFICATION

Model No：CSS-15104B7/15105B7

Descriptions:
• 1.5 Inch Single Digit Display • Emitting Color：Super Bright Blue

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY
			陳新強

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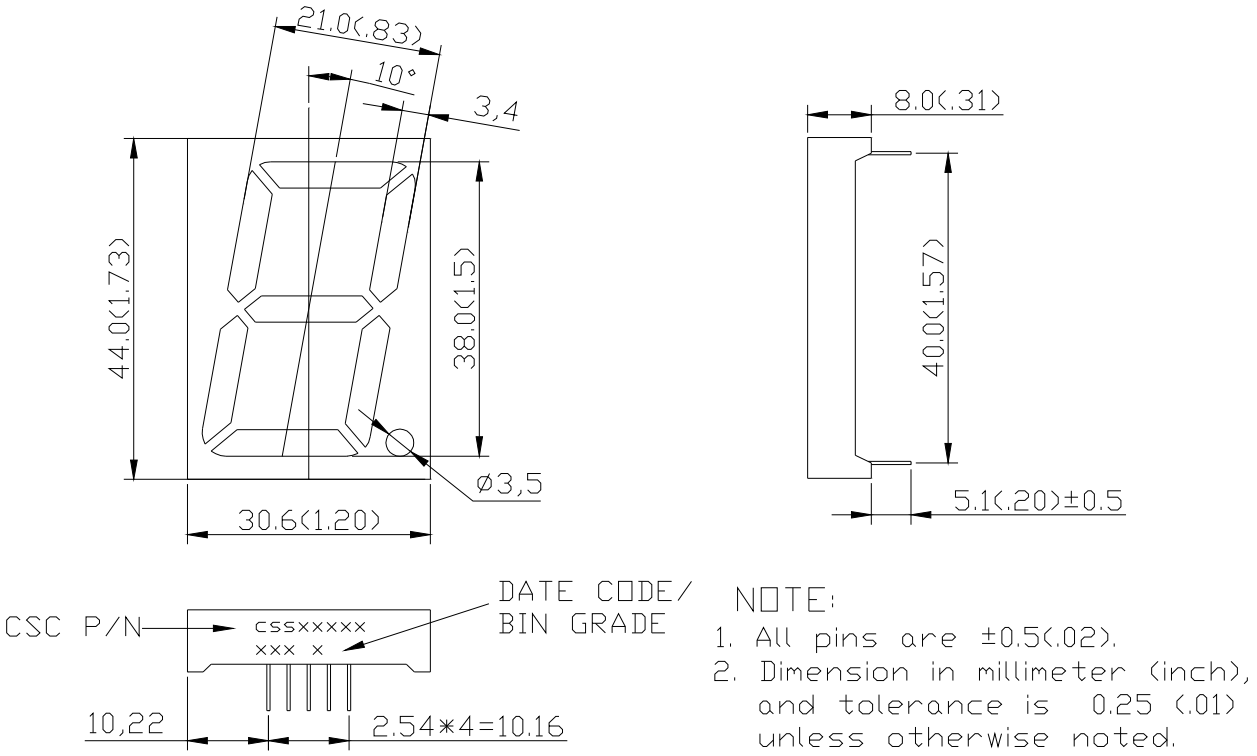
■ Features -

1. 1.5 inch (38.0mm) 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 -

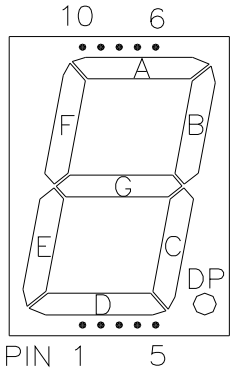
Part No.	Chip		Description
	Material	Emitted Color	
CSS-15104B7	InGaN	Super Bright Blue	Common Anode
CSS-15105B7	InGaN	Super Bright Blue	Common Cathode

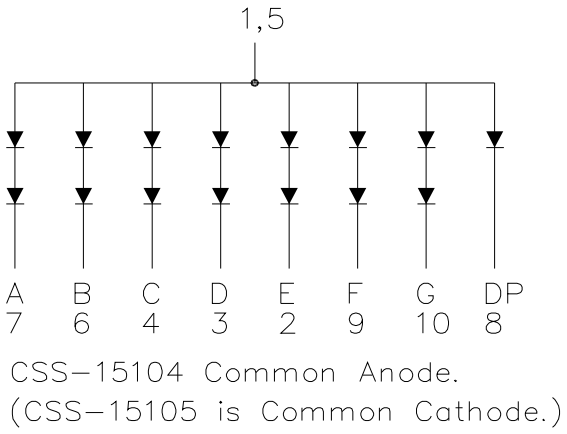
■ Mechanical Dimensions -



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■ Internal Circuit Diagrams -





■ Absolute Maximum Rating -

(Ta=25℃)

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, 1kKHz)	IPF	100	mA
Reverse Voltage Per Dice	VR	5	V
Operating Temperature	Topr	-35 ~ +85	℃
Storage Temperature	Tstg	-35 ~ +85	℃
Solder temperature 1/16 inch below seating plane for 3 seconds at 260 ℃			

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■ **Electro-optical Characteristics -**

(Ta=25℃)

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	λP	-	470	-	nm	
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	
Reverse Current	IR	-	-	50	μA	VR=10V

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■ Typical Electrical / Optical Charateristics Curves -

(Ta = 25℃ Unless Otherwise Noted)

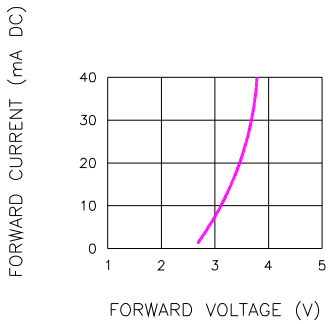


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

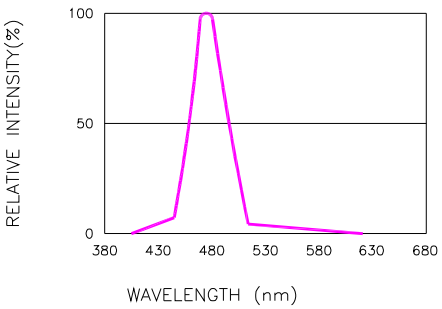


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

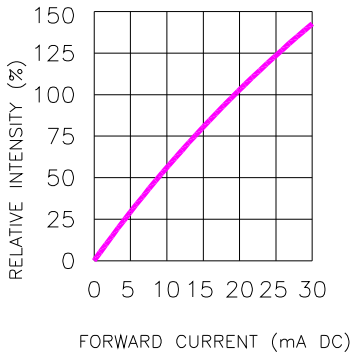


Fig.3 RELATIVE INTENSITY
VS. FORWARD CURRENT

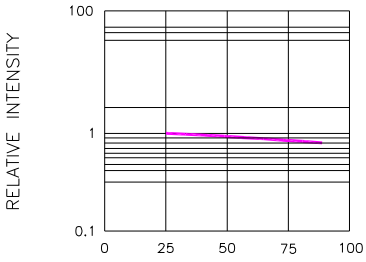


Fig.4 RELATIVE INTENSITY VS.LEAD TEMPERATURE
(PULSED 20 mA; 300us
PULSE,10ms PERIOD)

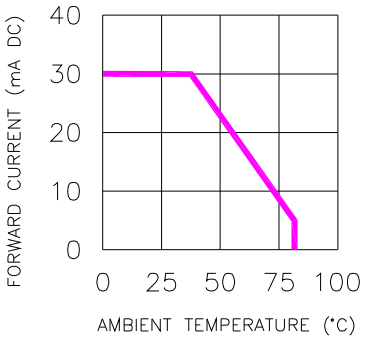


Fig.5 FORWARD CURRENT
VS. AMBIENT TEMPERATURE

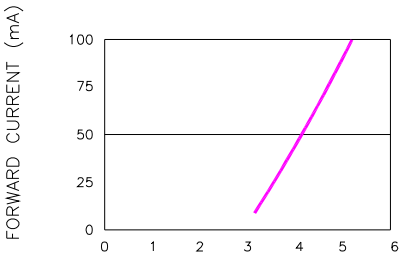


Fig.6 PEAK FORWARD VOLTAGE
VS.FORWARD(100us TEST PULSE,
1% DUTY CYCLE)

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■ Package Dimensions

