



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

# PRODUCT SPECIFICATION

**Model No : CSS-15104M9/15105M9**

## Descriptions:

- 1.5 Inch Single Digit Display
- Emitting Color : Super Bright Green



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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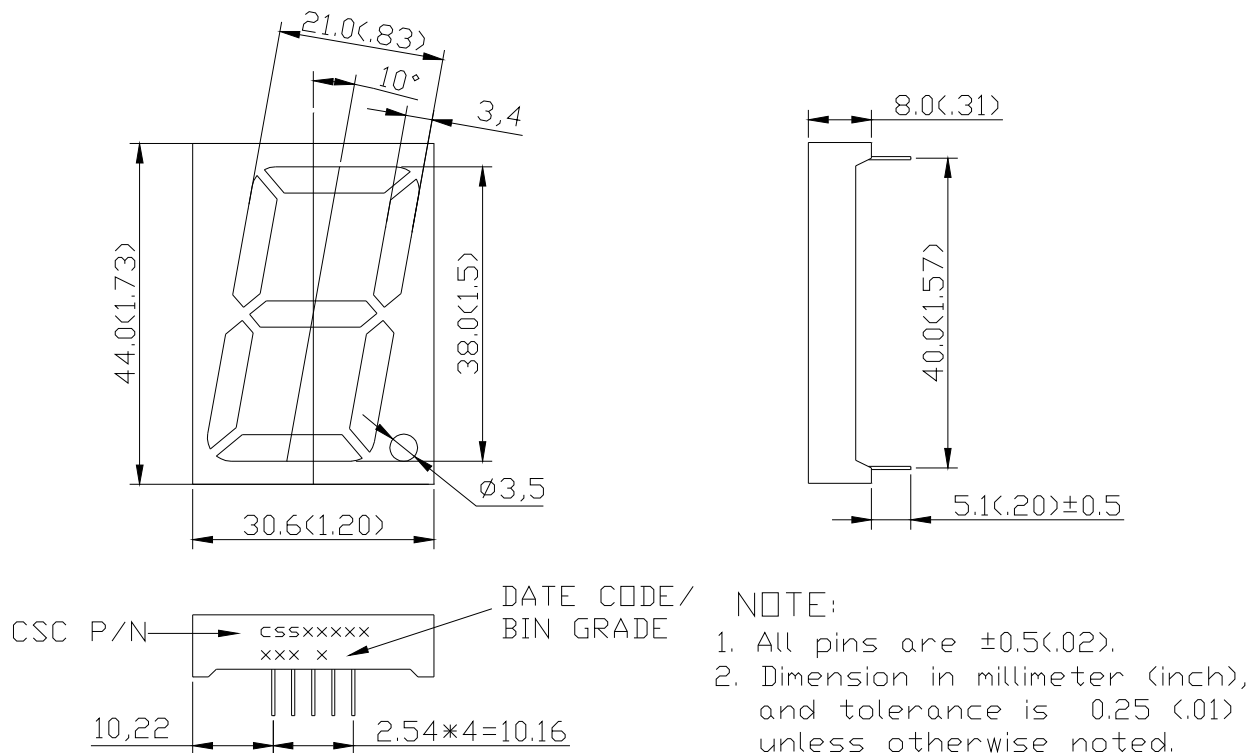
**Features -**

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	
<b>CSS-15104M9</b>	<b>AlGaInP</b>	<b>Super Bright Green</b>	<b>Common Anode</b>
<b>CSS-15105M9</b>	<b>AlGaInP</b>	<b>Super Bright Green</b>	<b>Common Cathode</b>

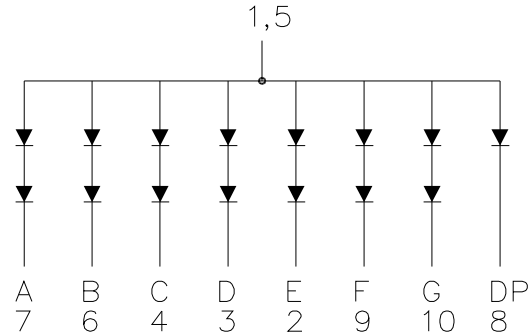
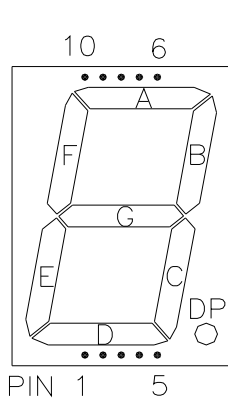
**Mechanical Dimensions -**





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Internal Circuit Diagrams -



CSS-15104 Common Anode.  
(CSS-15105 is Common Cathode.)

Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>Pd</b>	75	mW
Continuous Forward Current Per Dice	<b>IAF</b>	25	mA
Peak Current Per Dice	<b>IPF</b>	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	<b>VR</b>	5	V
Operating Temp.	<b>Topr</b>	-35 ~ +85	°C
Storage Temp.	<b>Tstg</b>	-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)	$V_F$	-	4.2(2.1)	5.6(2.8)	V	$I_F=20\text{mA}$
Luminous Intensity Per Segment	$I_v$	-	20	-	mcd	$I_F=10\text{mA}$
Peak Emission Wavelength	$\lambda_p$	-	572	-	nm	$I_F=20\text{mA}$
Dominant Wavelength	$\lambda_d$	-	570	-	nm	$I_F=20\text{mA}$
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	$I_F=20\text{mA}$
Reverse Current	$I_R$	-	-	100	$\mu\text{A}$	$V_R=10\text{V}$
Luminous Intensity Matching Ratio	$I_V\text{-m}$	-	-	2:1	-	$I_F=10\text{mA}$



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**Typical Electrical / Optical Characteristics Curves -**

(Ta = 25°C Unless Otherwise Noted)

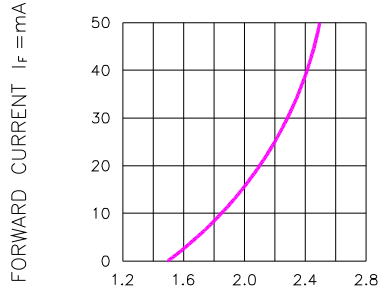


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

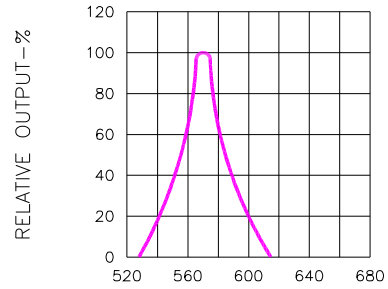


Fig.2 SPECTRAL RESPONSE

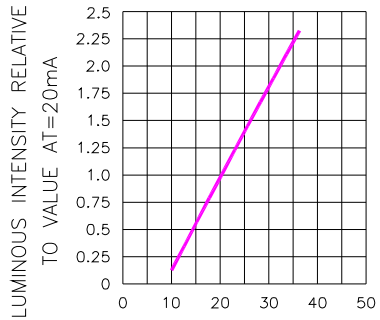


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

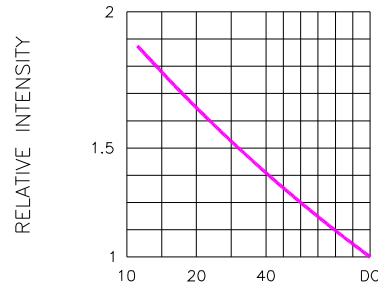


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE (AVERAGE I<sub>F</sub> = 10mA)

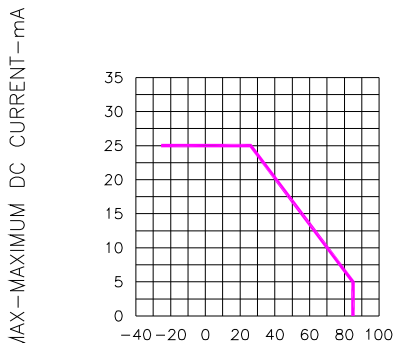


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

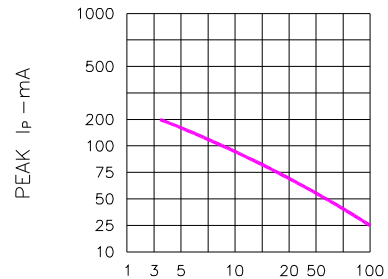


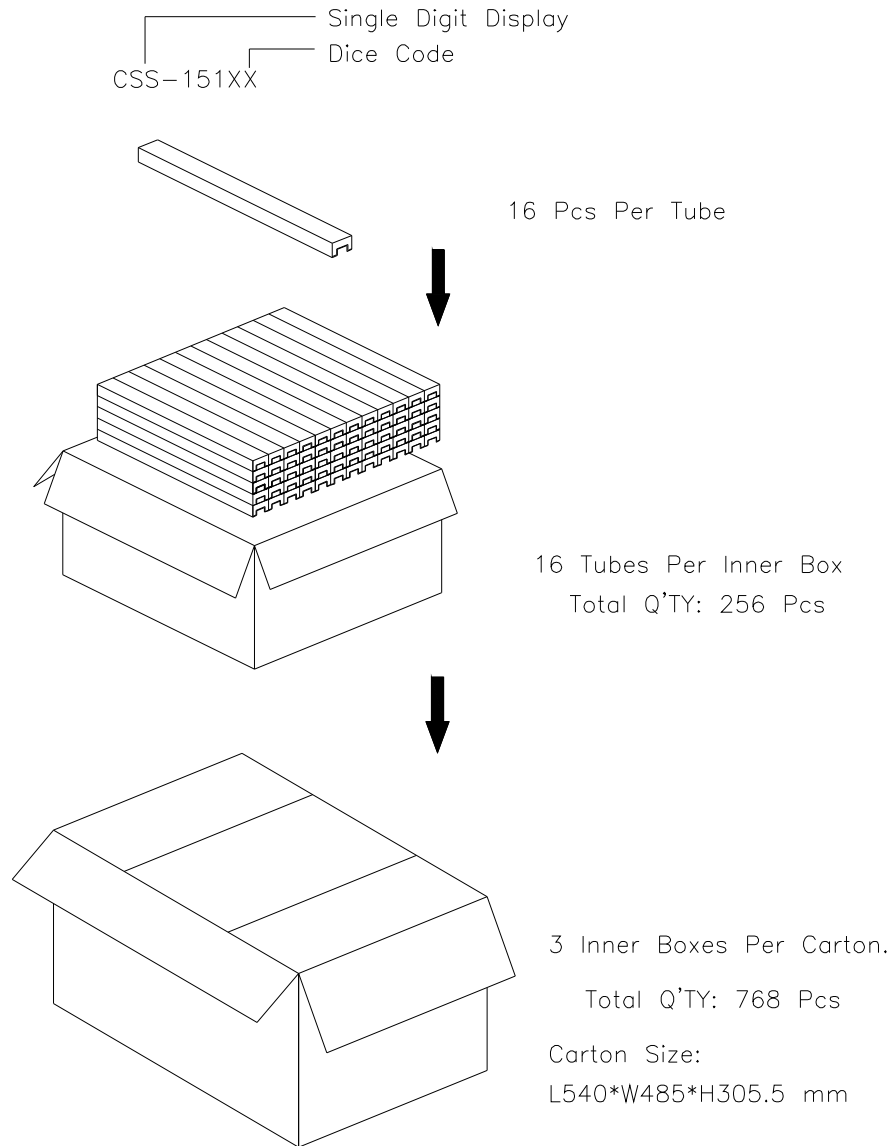
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f = 1 KHz)



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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>