



# PRODUCT SPECIFICATION

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

## Descriptions:

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



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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

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

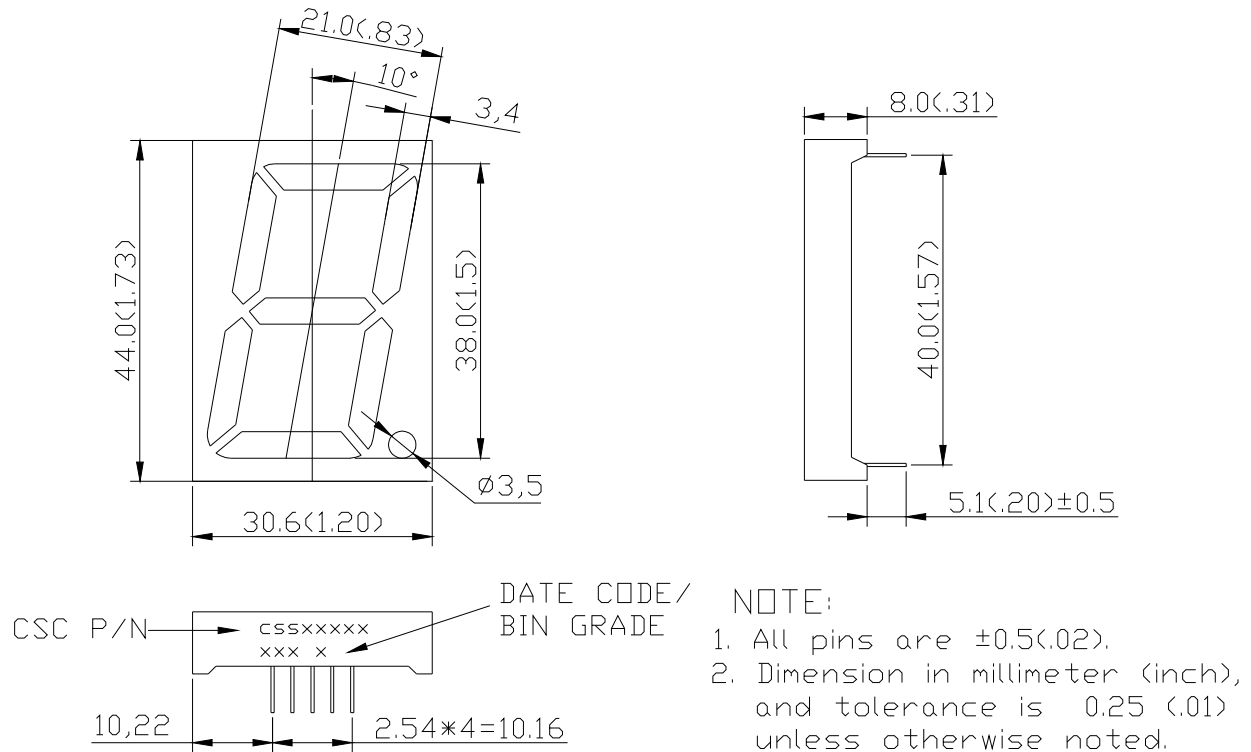
**Features -**

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-15104S	AlGaAs	Super Bright Red	Common Anode
CSS-15105S	AlGaAs	Super Bright Red	Common Cathode

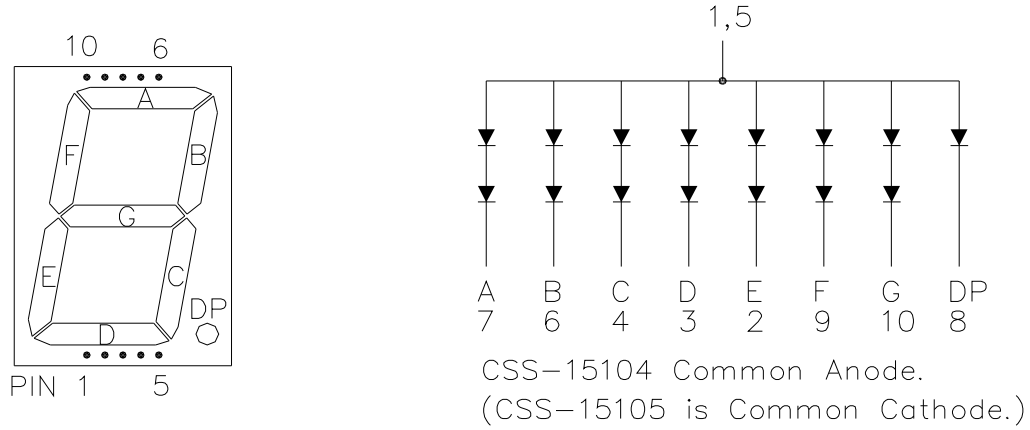
**Mechanical Dimensions -**





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Internal Circuit Diagrams -



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>	30	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	<b>IPF</b>	120	mA
Derating Linear From 25°C Per Dice	-	0.42	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)	VF	-	3.6(1.8)	5.0(2.5)	V	If=20mA
Luminous Intensity Per Segment	Iv	-	15	-	mcd	If=20mA
Peak Emission Wavelength	$\lambda_p$	-	660	-	nm	If=20mA
Dominant Wavelength	$\lambda_d$	-	643	-	nm	If=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	If=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=10V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	If=20mA



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**Typical Electrical / Optical Characteristics Curves -**

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

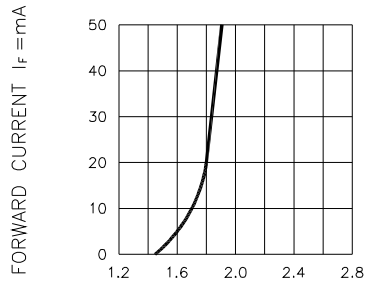


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

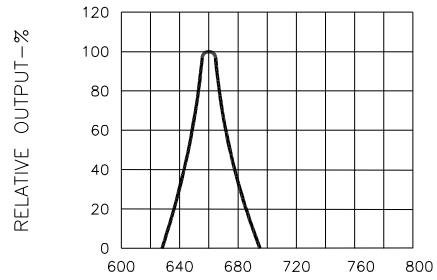


Fig.2 SPECTRAL RESPONSE

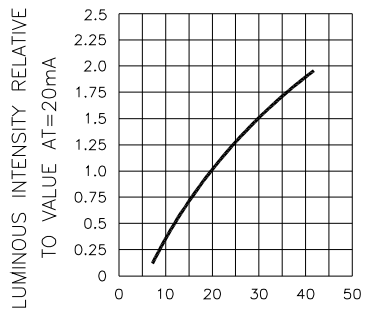


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

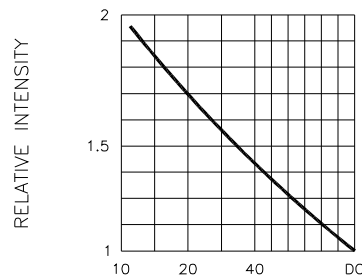


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

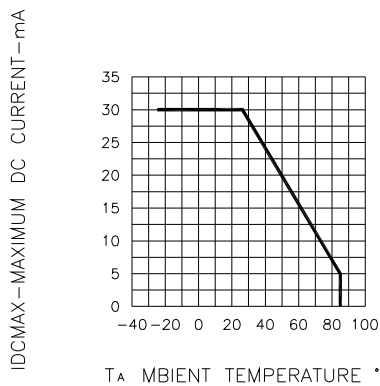


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

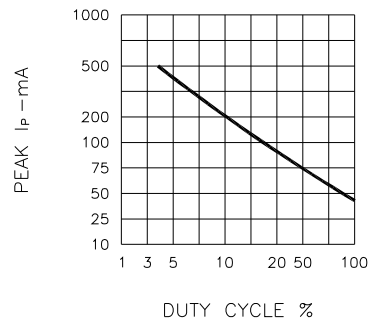


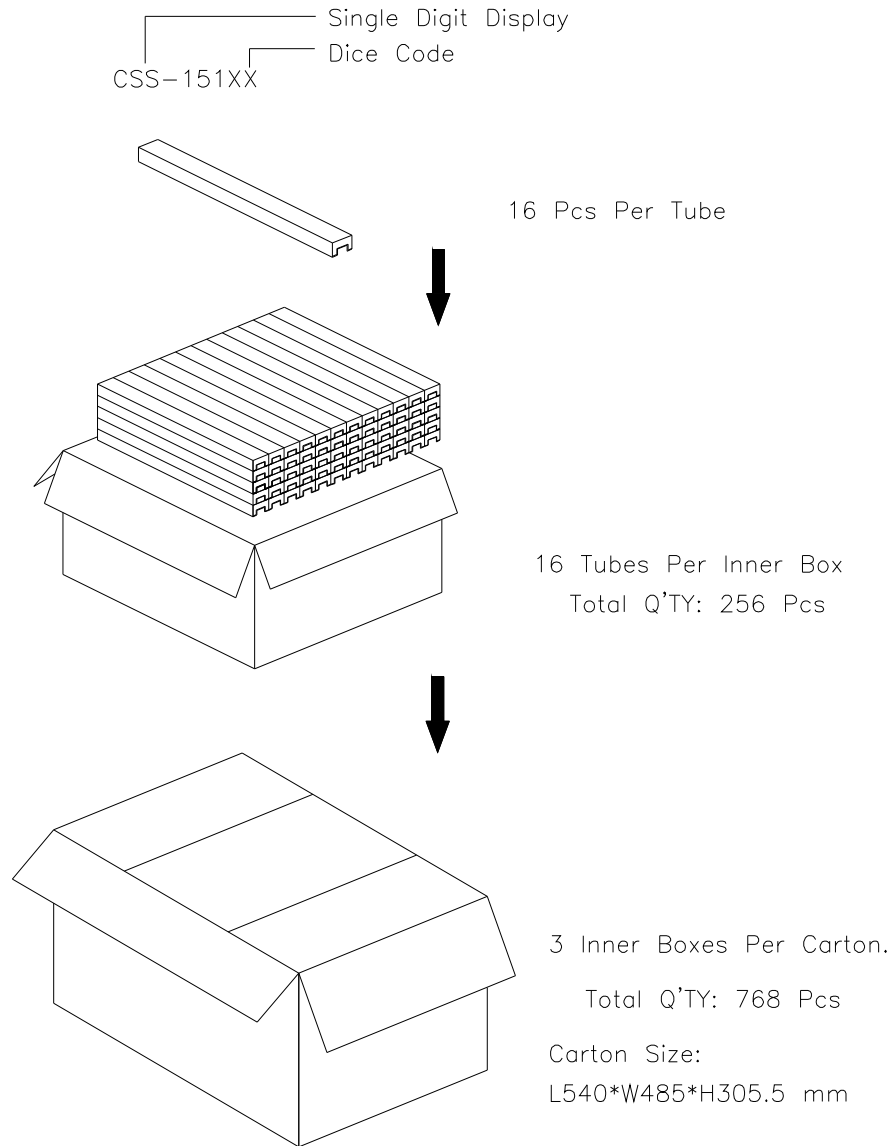
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



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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>