



PRODUCT SPECIFICATION

Model No : CSS-15104A9/15105A9

Descriptions:

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



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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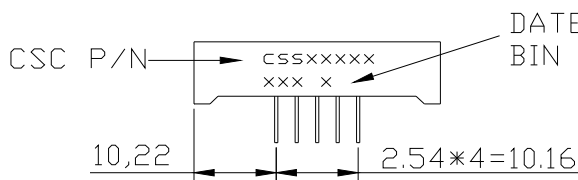
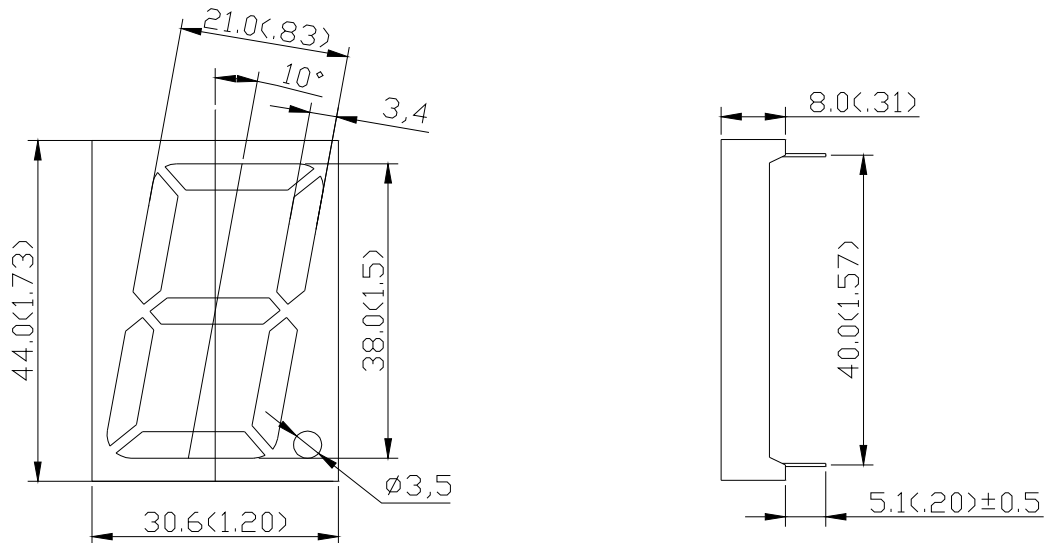
Features -

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	
CSS-15104A9	AlGaInP	Super Bright Amber	Common Anode
CSS-15105A9	AlGaInP	Super Bright Amber	Common Cathode

Mechanical Dimensions -



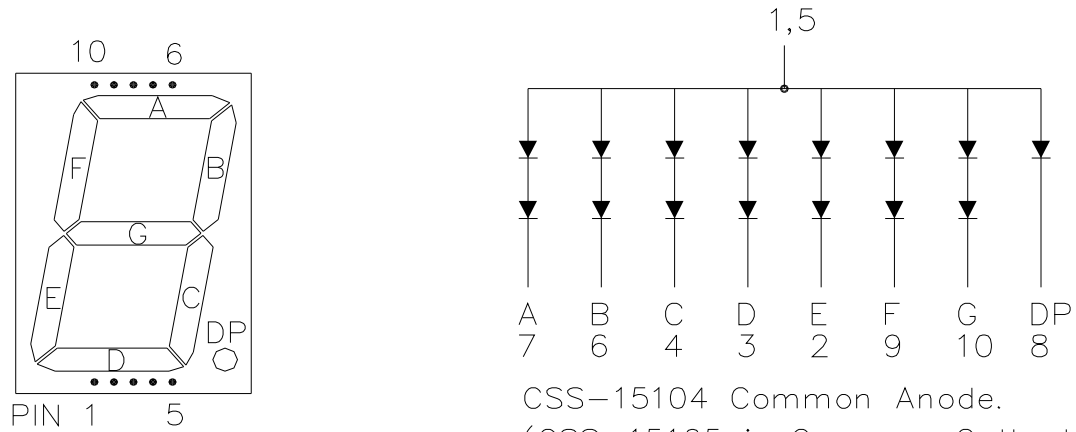
NOTE:

1. All pins are $\pm 0.5 (0.02)$.
2. Dimension in millimeter (inch), and tolerance is $0.25 (0.01)$ 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	75	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice (duty cycle 1/10, 1KHz)	IPF	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	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)

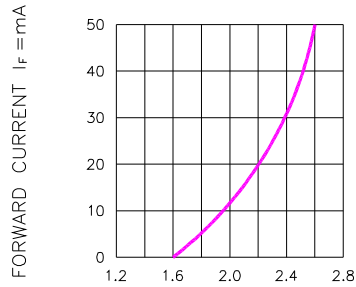
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment (DP)	VF	-	4.0(2.0)	5.6(2.8)	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	50	-	mcd	IF=10mA
Peak Emission Wavelength	λ_p	-	612	-	nm	IF=20mA
Dominant Wavelength	λ_d	-	606	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	μ A	VR=10V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1		IF=10mA



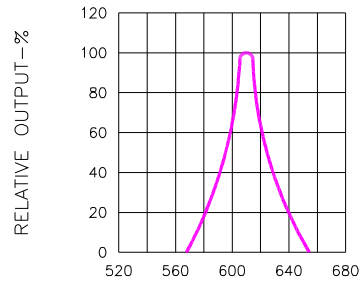
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Typical Electrical / Optical Characteristics Curves -

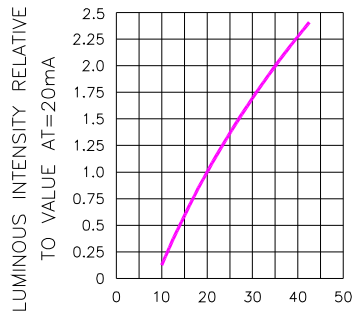
(Ta = 25°C Unless Otherwise Noted)



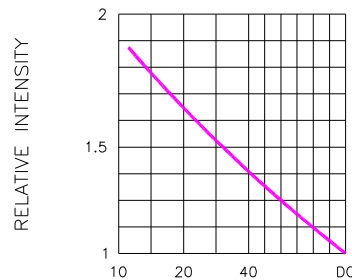
FORWARD VOLTAGE (V_f)—VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE



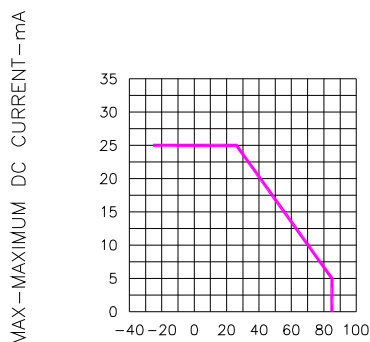
WAVELENGTH (λ)—nm
Fig.2 SPECTRAL RESPONSE



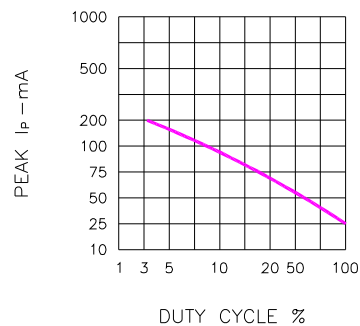
I_f —FORWARD CURRENT—mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



DUTY CYCLE % PER SEGMENT
(AVERAGE $I_f = 10\text{mA}$)
Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



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



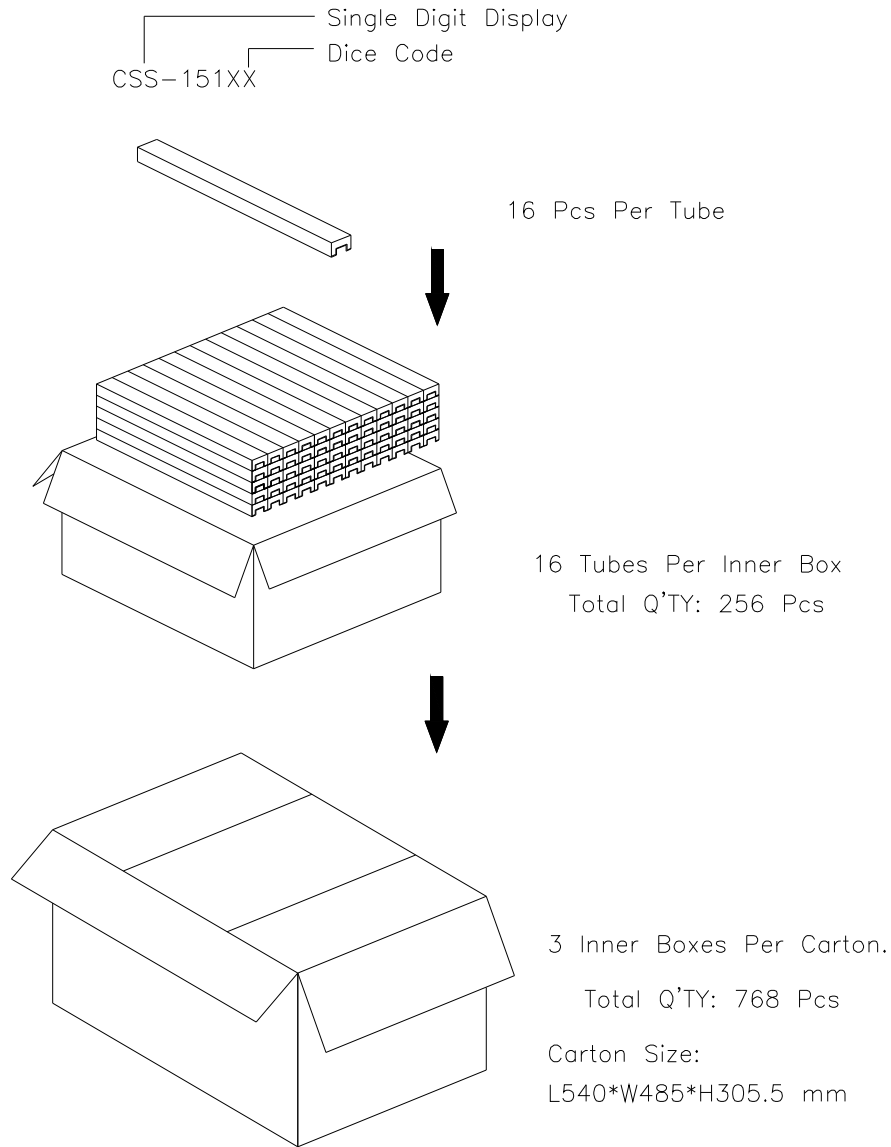
DUTY CYCLE %
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE (REFRESH RATE $f = 1\text{KHz}$)



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

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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>