CHINA
SEMICONDUCTOR
CORPORATION

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

PRODUCT SPECIFICATION

Model No：CSS-15104A9/15105A9

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

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY
			陳新強

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Model No：CSS-15104A9/15105A9

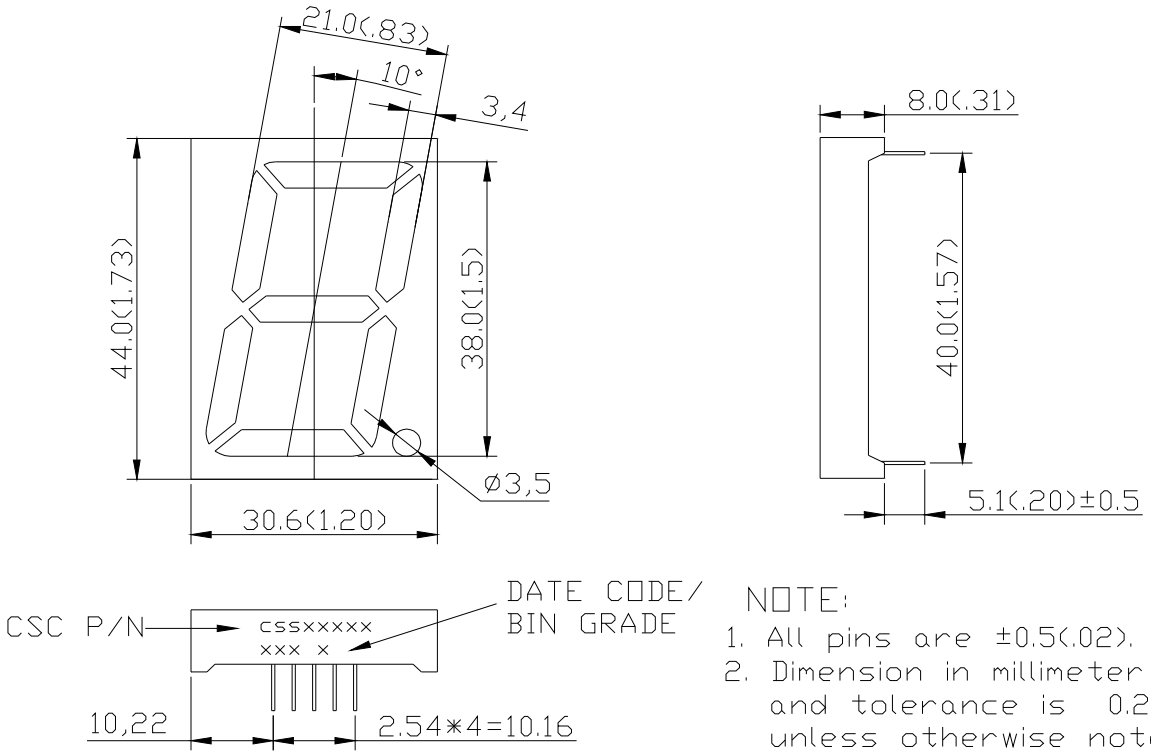
■ Features -

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 -

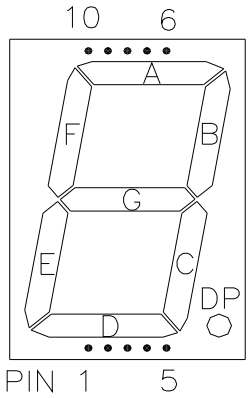
Part No.	Chip		Description
	Material	Emitted Color	
CSS-15104A9	AlGaInP	Super Bright Amber	Common Anode
CSS-15105A9	AlGaInP	Super Bright Amber	Common Cathode

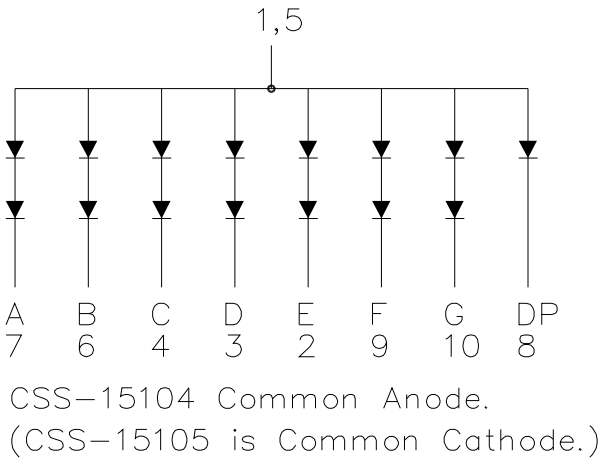
■ Mechanical Dimensions -



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■ Internal Circuit Diagrams -





■ Absolute Maximum Rating -

(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	**Pd**	75	mW
Continuous Forward Current Per Dice	**I_{AF}**	25	mA
Peak Current Per Dice (duty cycle 1/10, 1KHz)	**I_{PF}**	90	mA
Derating Linear From 25℃ Per Dice	-	0.33	mA/℃
Reverse Voltage Per Dice	**V_R**	5	V
Operating Temp.	**Topr**	-35 ~ +85	℃
Storage Temp.	**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	-	4.0(2.0)	5.6(2.8)	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	50	-	mcd	IF=10mA
Peak Emission Wavelength	λp	-	612	-	nm	IF=20mA
Dominant Wavelength	λd	-	606	-	nm	IF=20mA
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	μA	VR=10V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1		IF=10mA

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■ Typical Electrical / Optical Charateristics Curves -

(Ta = 25℃ Unless Otherwise Noted)

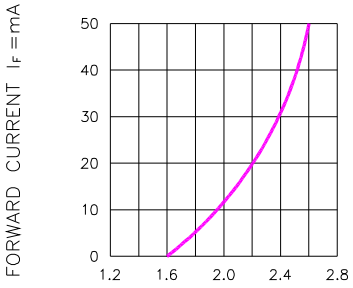


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

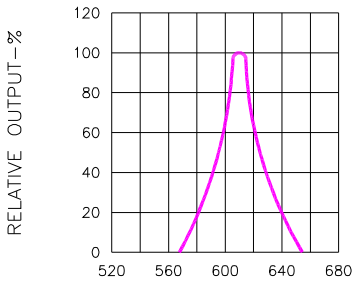


Fig.2 SPECTRAL RESPONSE

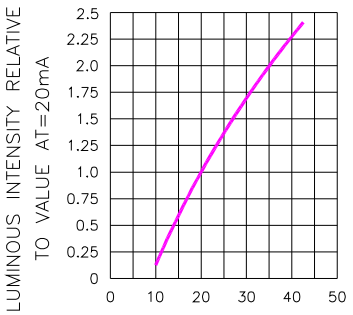


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

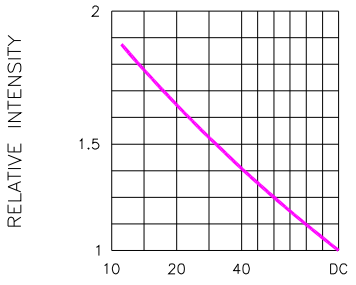


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

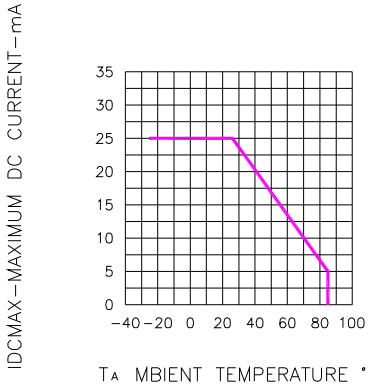


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

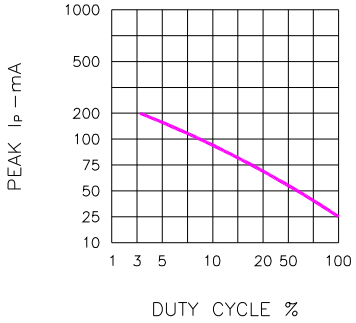
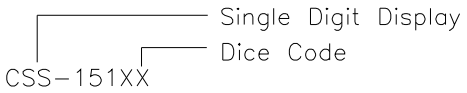
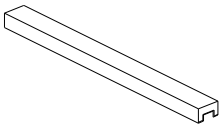


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

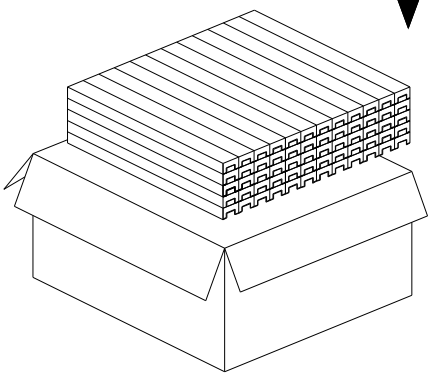
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■ Package Dimensions

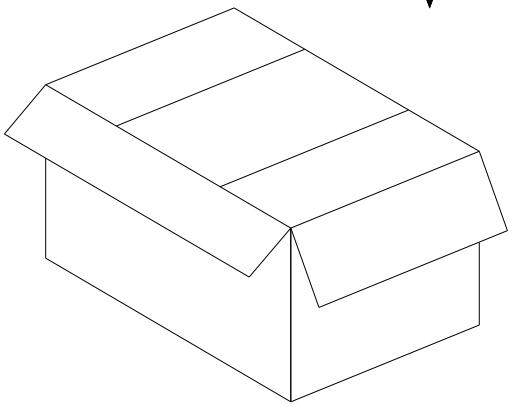




16 Pcs Per Tube



16 Tubes Per Inner Box
Total Q'TY: 256 Pcs



3 Inner Boxes Per Carton.

Total Q'TY: 768 Pcs

Carton Size:
L540*W485*H305.5 mm