



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

# PRODUCT SPECIFICATION

**Model No : CSS-1014S/1015S**

Descriptions:
<ul style="list-style-type: none"> <li>• 1.0 Inch Single Digit Display</li> <li>• Emitting Color : Super Bright Red</li> </ul>



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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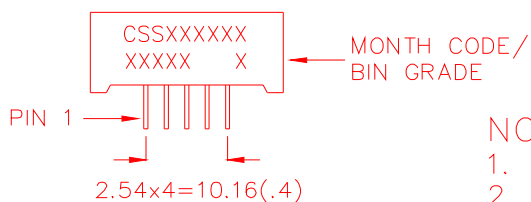
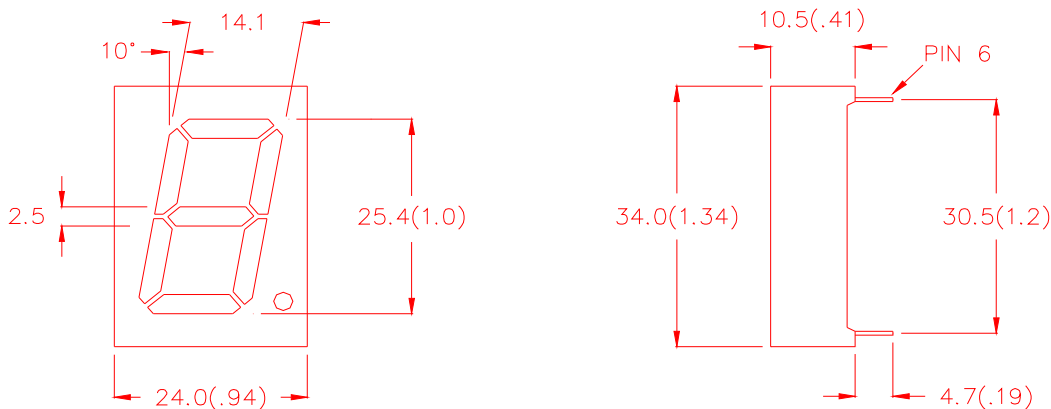
**Features -**

1. 1.0 inch (25.4mm) 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-1014S</b>	<b>AlGaAs</b>	<b>Super Bright Red</b>	<b>Common Anode</b>
<b>CSS-1015S</b>	<b>AlGaAs</b>	<b>Super Bright Red</b>	<b>Common Cathode</b>

**Mechanical Dimensions -**



**NOTE:**

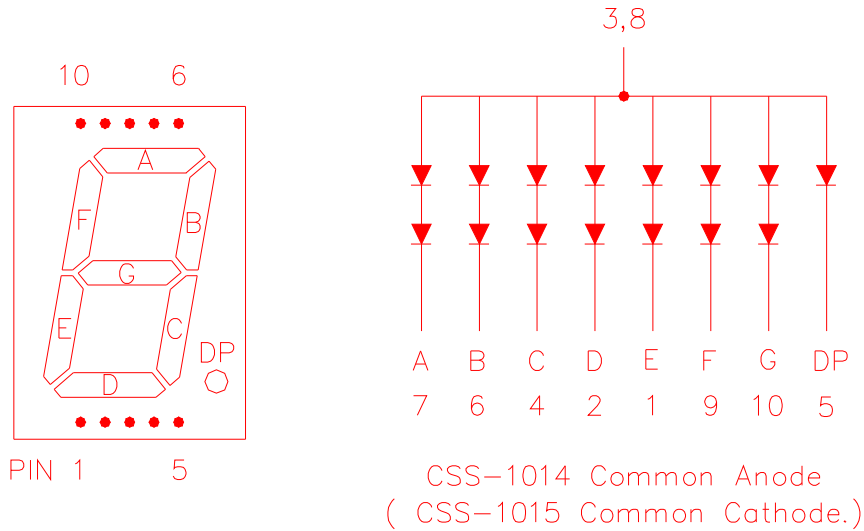
1. All pins are  $\phi 0.5(.02)$ .
2. Dimension in millimeter (inch), and tolerance is  $\pm 0.25 (.01)$  unless otherwise noted.



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Internal Circuit Diagrams -



Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>Pd</b>	75	mW
Continuous Forward Current Per Dice	<b>IAF</b>	30	mA
Peak Current Per Dice (duty cycle 1/10, 1KH)	<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)	$V_F$	-	3.6(1.8)	5.0(2.5)	V	$I_F=20\text{mA}$
Luminous Intensity Per Segment	$I_v$	-	12	-	mcd	$I_F=20\text{mA}$
Peak Emission Wavelength	$\lambda_p$	-	660	-	nm	$I_F=20\text{mA}$
Dominant Wavelength	$\lambda_d$	-	643	-	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	IV-m	-	-	2:1	-	$I_F=20\text{mA}$



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

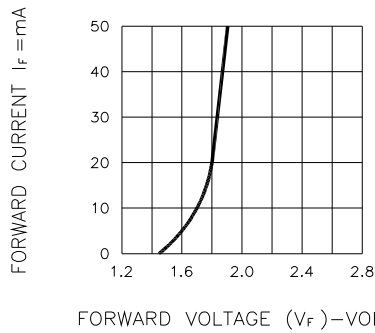


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

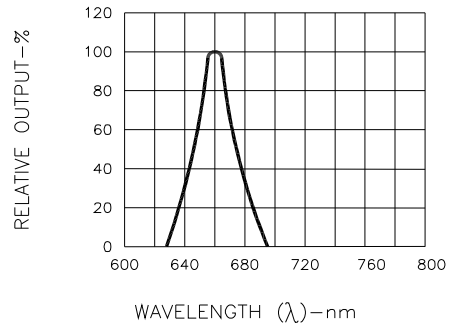


Fig.2 SPECTRAL RESPONSE

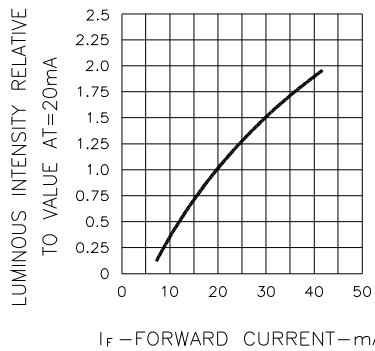


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

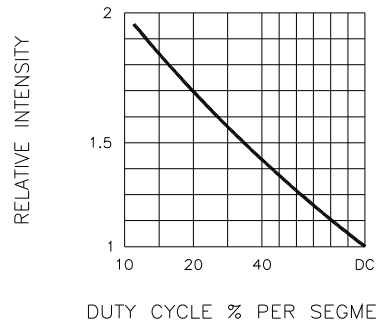


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

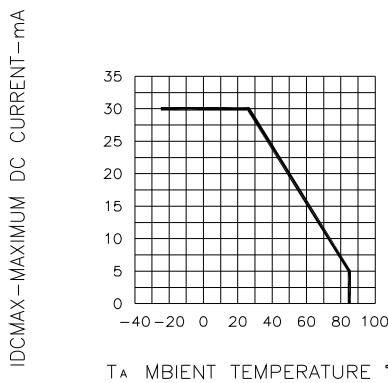


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

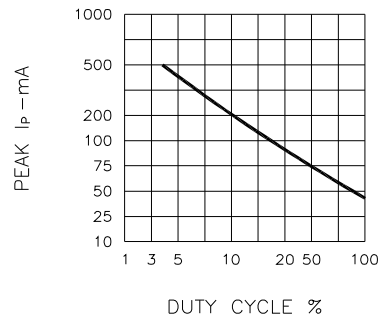


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



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■ Package Dimensions

