



Spec. No.	PS-ND-080626
Rev.	A

# PRODUCT SPECIFICATION

**Model No : CSS-816D-21**

Descriptions:
<ul style="list-style-type: none"> <li>• 0.8 Inch Single Digit Display</li> <li>• Common Anode</li> <li>• Emitting Color: Super-Bright Red (DH)</li> <li>• Black Face</li> <li>• White Segment</li> </ul>



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

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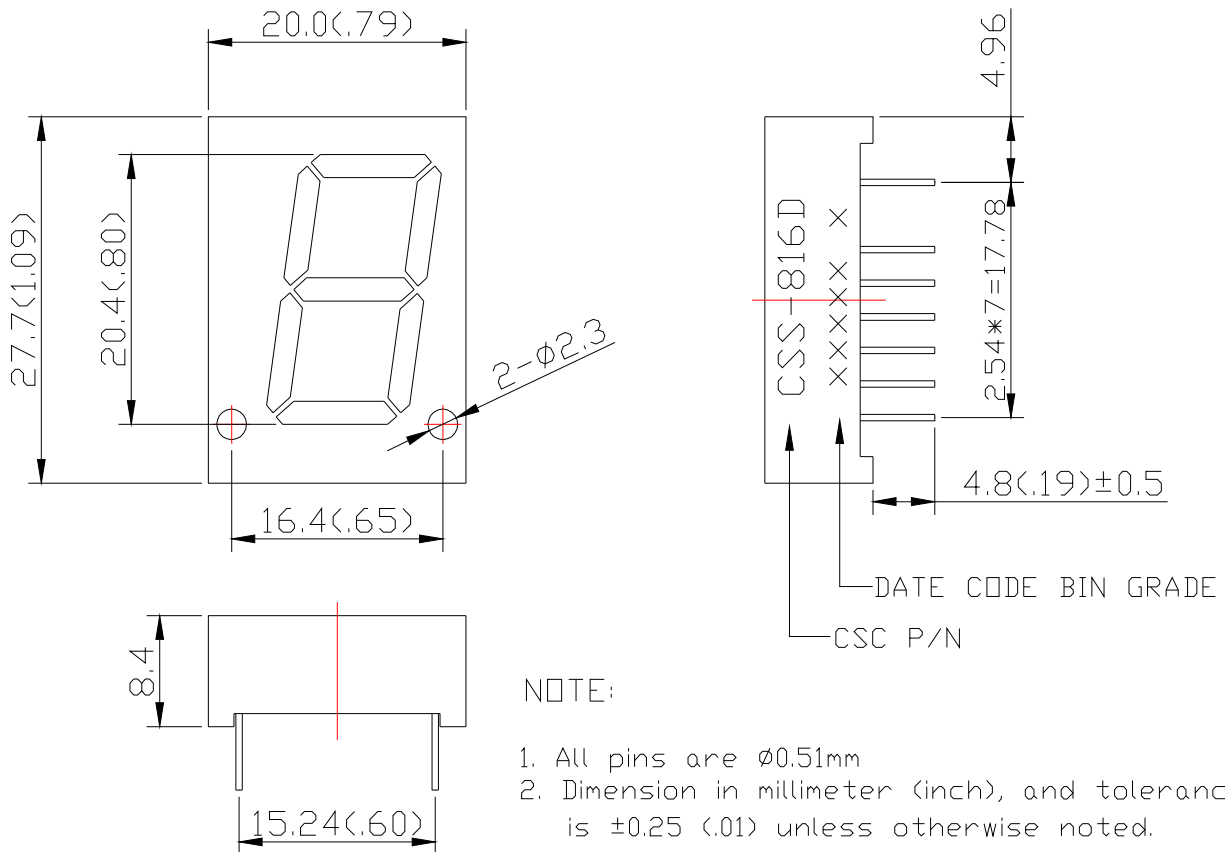
**Features -**

1. 0.8 inch (20.4mm) 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		Face / Segment
	Material	Emitted Color	
CSS-816D	AlGaAs	Super-Bright Red	Black / White

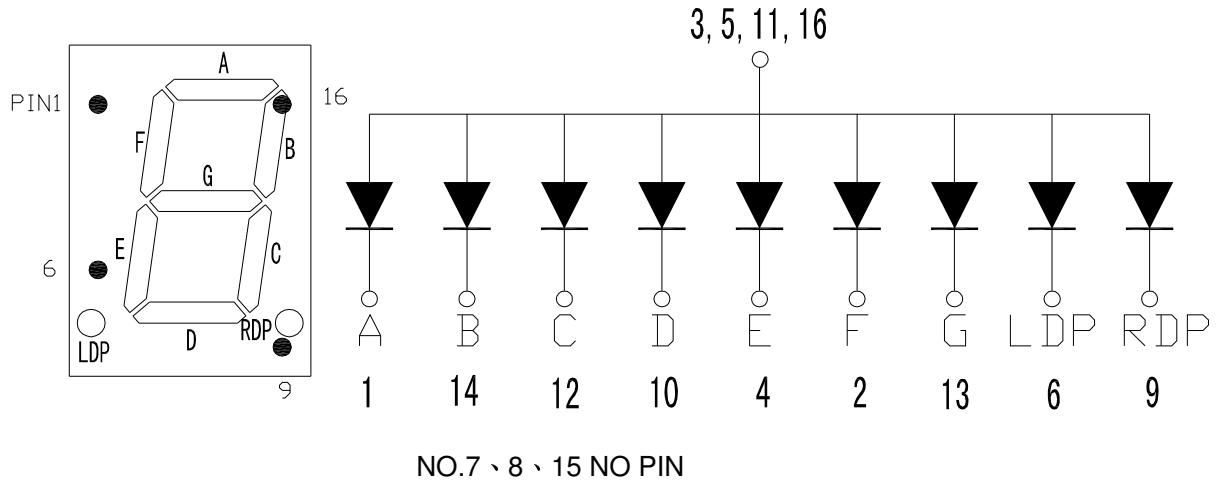
**Mechanical Dimensions -**





Model No : CSS-816D-21

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	30	mA
Peak Current Per Dice	IPF	200	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	$V_F$	-	1.8	2.5	V	$I_F=20mA$
Luminous Intensity Per Segment	$I_V$	-	18	-	mcd	$I_F=20mA$
Peak Emission Wavelength	$\lambda_P$	-	660	-	nm	$I_F=20mA$
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	$I_F=20mA$
Reverse Current	$I_R$	-	-	100	$\mu A$	$V_R=5V$



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**Typical Electrical / Optical Characteristics Curves -**

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

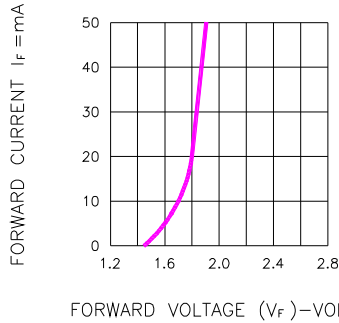


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

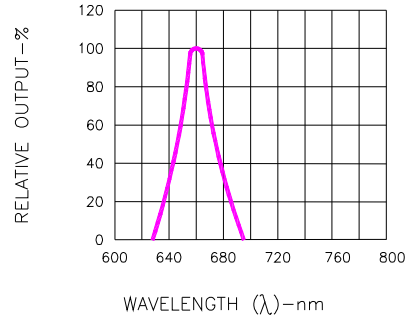


Fig.2 SPECTRAL RESPONSE

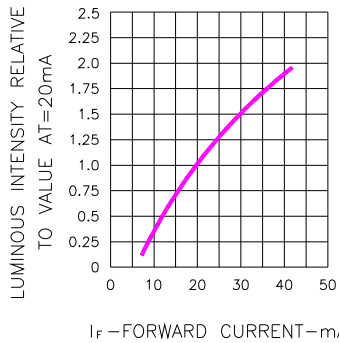


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

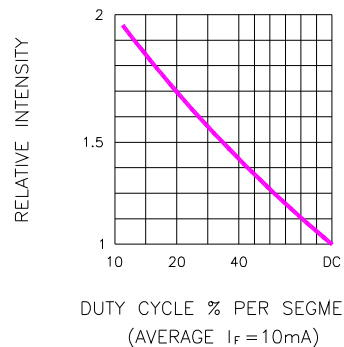


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

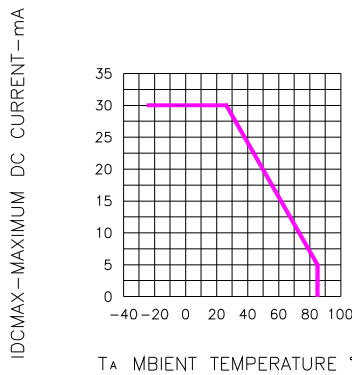


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

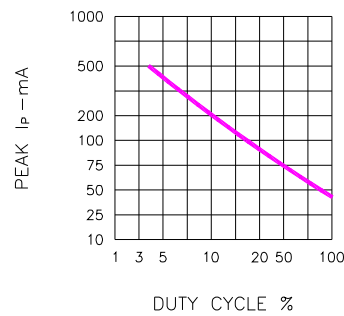


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

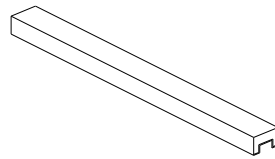


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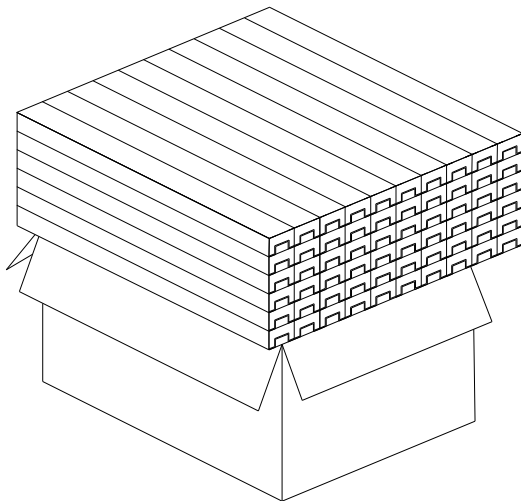
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■ Package Dimensions

Single Digit Display  
Dice Code  
CSS-816D-21

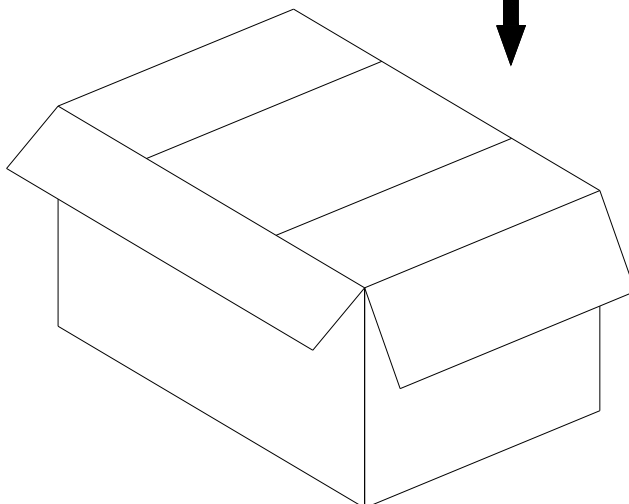


18 PCS per tube



60 Tubes per inner box

Total Q'TY: 1080 pcs



3 Inner boxes per carton.

Total Q'TY: 3240 pcs

Box size:  
L54xW48.5xH30.5cm