



Spec. No.	PS-ND-0712
Rev.	A

# PRODUCT SPECIFICATION

**Model No : CSS-5160M9/CSS-5161M9**

## Descriptions:

- 0.50 Inch Single Digit Alphanumeric Display
- Emitting Color: Super-Bright Yellow Green



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			

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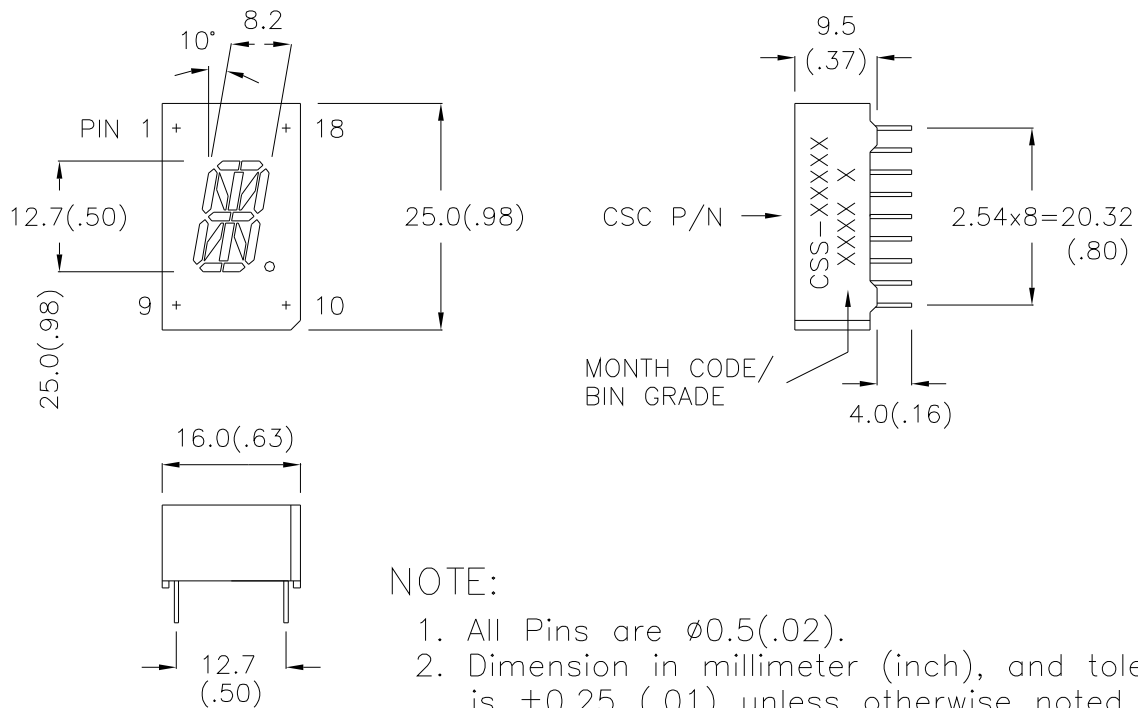
**Features -**

1. 0.50 inch (12.7 mm) digit height.
2. Case mold type.
3. RoHs compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Part No.	Chip		Description
	Material	Emitted Color	
<b>CSS-5160M9</b>	<b>AlGaInP</b>	<b>Super-Bright Yellow Green</b>	<b>Common Anode</b>
<b>CSS-5161M9</b>			<b>Common Cathode</b>

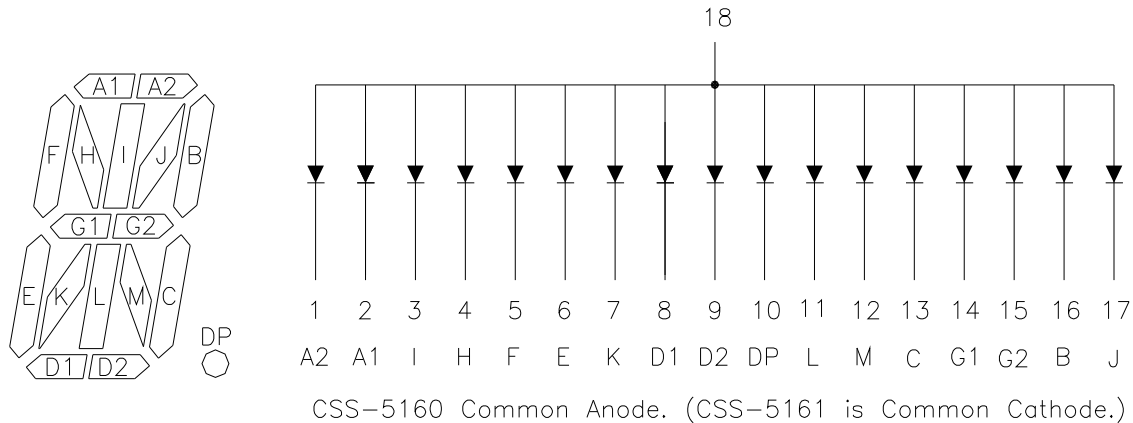
**Package Dimensions -**





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Internal Circuit Diagrams -



Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	65	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 Temperature	Topr	-25 ~ +85	°C
Storage Temperature	Tstg	-25 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260			



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■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	VF	-	2.1	2.6	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	10	-	mcd	IF=10mA
Peak Emission Wavelength	$\lambda_p$	-	572	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=5V
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)**

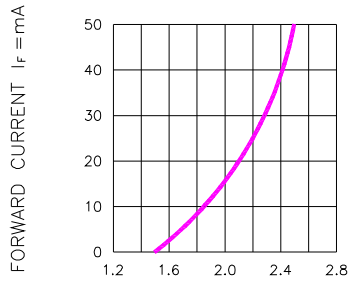


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

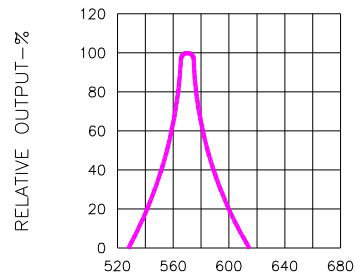


Fig.2 SPECTRAL RESPONSE

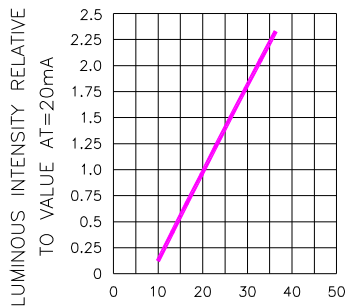


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

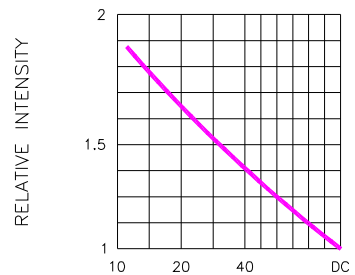


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

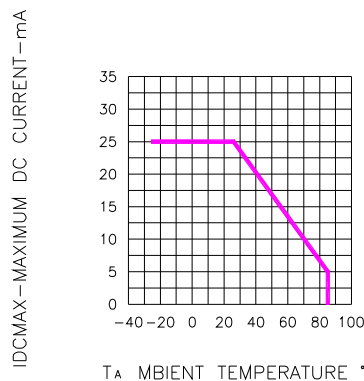


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

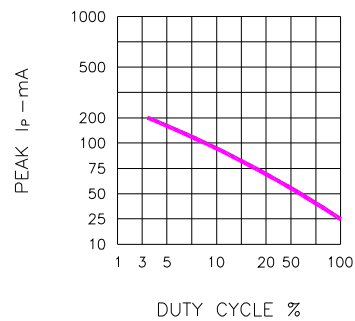


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

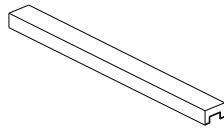


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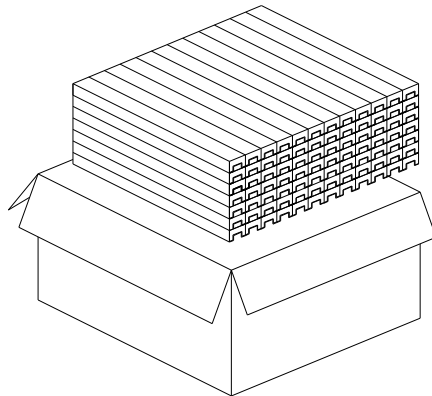
Model No : CSS-516M9/5161M9

■ Package Dimensions

S = Single Digit Display  
Dice Code  
CSS-516xX-XX  
Segment Resin Color Code.  
Surface silk Screen Ink Code.



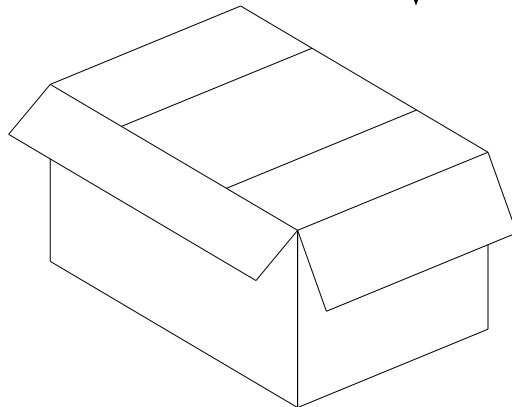
1 TUBE From Box = 20 PCS



1 BOX= 60 TUBE From Box  
Q'TY: 1200 PCS.



1 CARTON = 3 BOX.  
Q'TY: 3600 PCS.



CARTON SIZE:  
L540xW485xH305mm

Note: The specifications are subject to change without notice. Please contact us for updated information.