



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

PRODUCT SPECIFICATION

Model No : CSS-1116A9/CSS-1117A9

Descriptions:

- 1.0 Inch Single Digit Alphanumeric Display
- Emitting Color: Super-Bright Amber



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			

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Model No : CSS-1116A9/1117A9

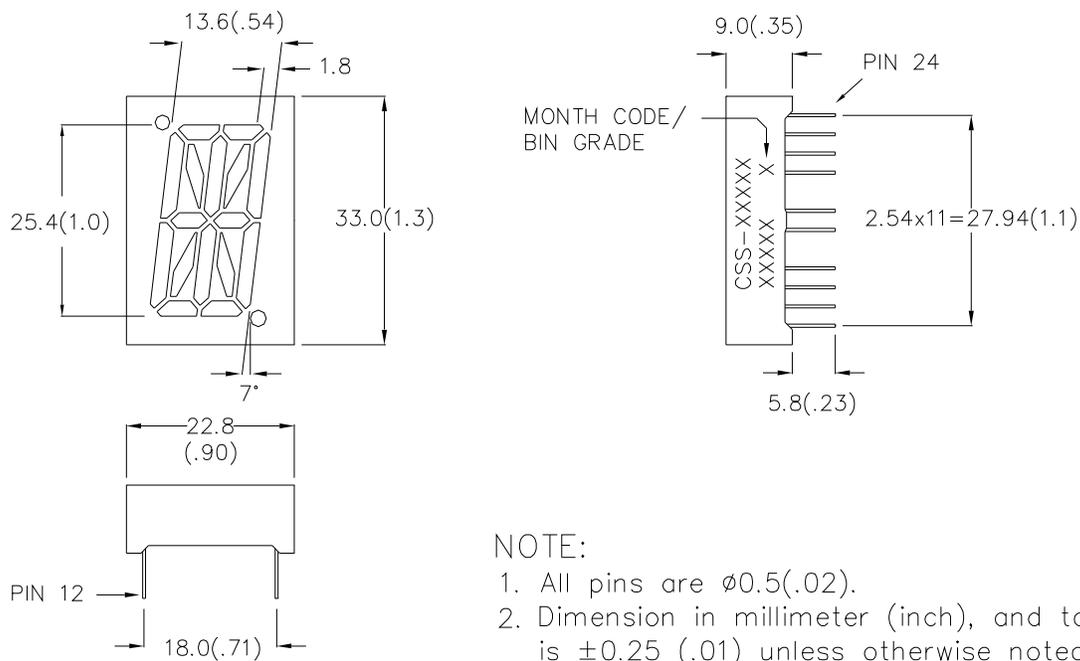
■ Features -

1. 1.00 inch (25.4 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	
CSS-1116A9	AlGaInP	Super-Bright Amber	Common Anode
CSS-1117A9			Common Cathode

■ Package Dimensions -

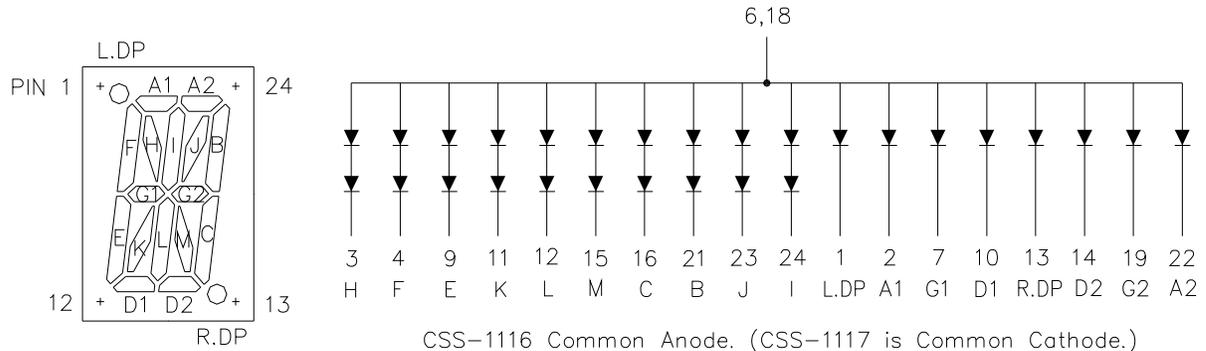




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Internal Circuit Diagrams -



CSS-1116 Common Anode. (CSS-1117 is Common Cathode.)
NO. 5, 8, 17, 20 No Pin.

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 °C			



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Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Two Dice (One Dice)	VF	-	4.0(2.0)	5.2(2.6)	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	35	-	mcd	IF=10mA
Peak Emission Wavelength	λ_p	-	612	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	μA	VR=10V
Luminous Intensity Matching Ratio	IV-m	-	-	2 : 1	-	IF=20mA

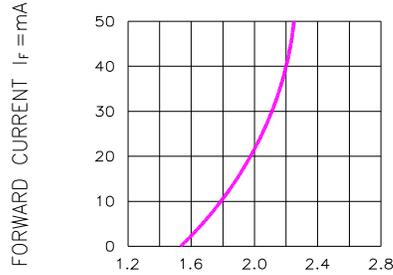


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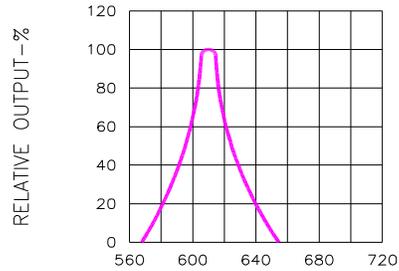
Model No : CSS-1116A9/1117A9

Typical Electrical / Optical Characteristics Curves -

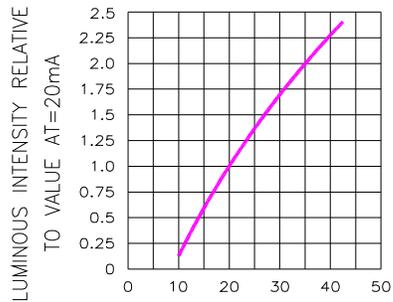
(Ta = 25°C Unless Otherwise Noted)



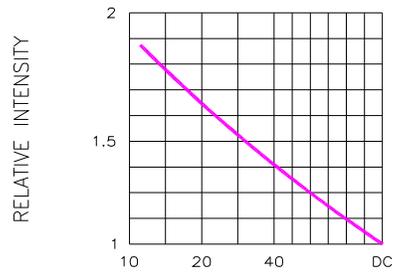
FORWARD VOLTAGE (V_F)—VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE



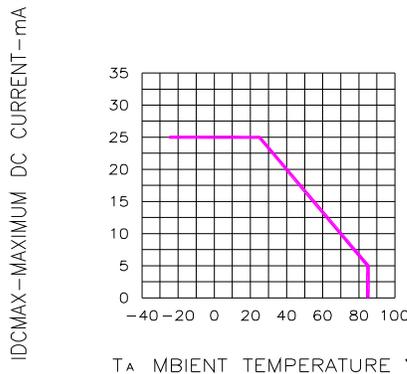
WAVELENGTH (λ)—nm
Fig.2 SPECTRAL RESPONSE



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



DUTY CYCLE % PER SEGMENT
(AVERAGE I_F = 10mA)
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



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

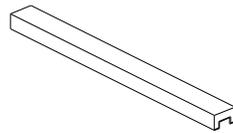


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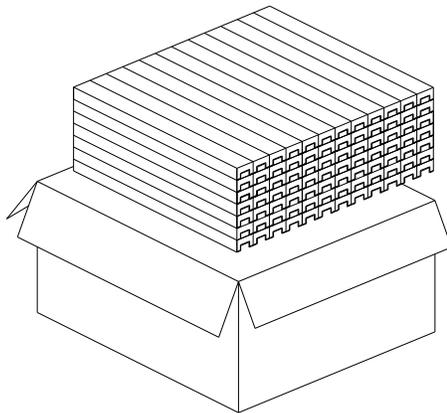
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Package Dimensions

S = Single Digit Displays
 Dice Code
 CSS-1116X-21
 Segment Resin Color Code. 1=White Segment.
 Surface silk Screen Ink Code. 2=Black (1=Gray).



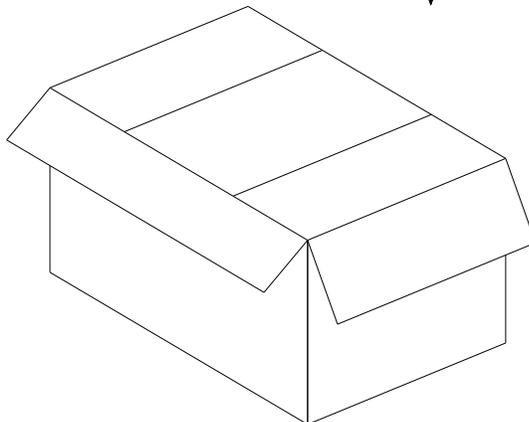
1 TUBE From Box = 15 PCS



1 BOX= 50 TUBE From Box
Q'TY: 750 PCS.



1 CARTON = 3 BOX.
Q'TY: 2250 PCS.



CARTON SIZE:
L540xW485xH305mm

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