



Spec. No.	PS-ND-0807
Rev.	A

PRODUCT SPECIFICATION

Model No : CSS-4012V9/4013V9

Descriptions:

- 4.0 Inch Single Digit Display
- Emitting Color : Super Bright Orange



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			陳新強

CHINA SEMICONDUCTOR CORPORATION

Address:2FL. NO.909,Chung-Cheng Road,
Chung-Ho City Taipei Hsien,Taiwan.

Tel:886-2-2223-9696
Fax:886-2-2223-9377

OPTO PLUS TECHNOLOGIES CO.,LTD

Address:696 Shun jiang Rd.,Ji Shan St.Shaoxing,
ZheJiang,China

Tel:86-0575-88623888
Fax:86-0575-88623112



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Model No : CSS-4012V9/4013V9

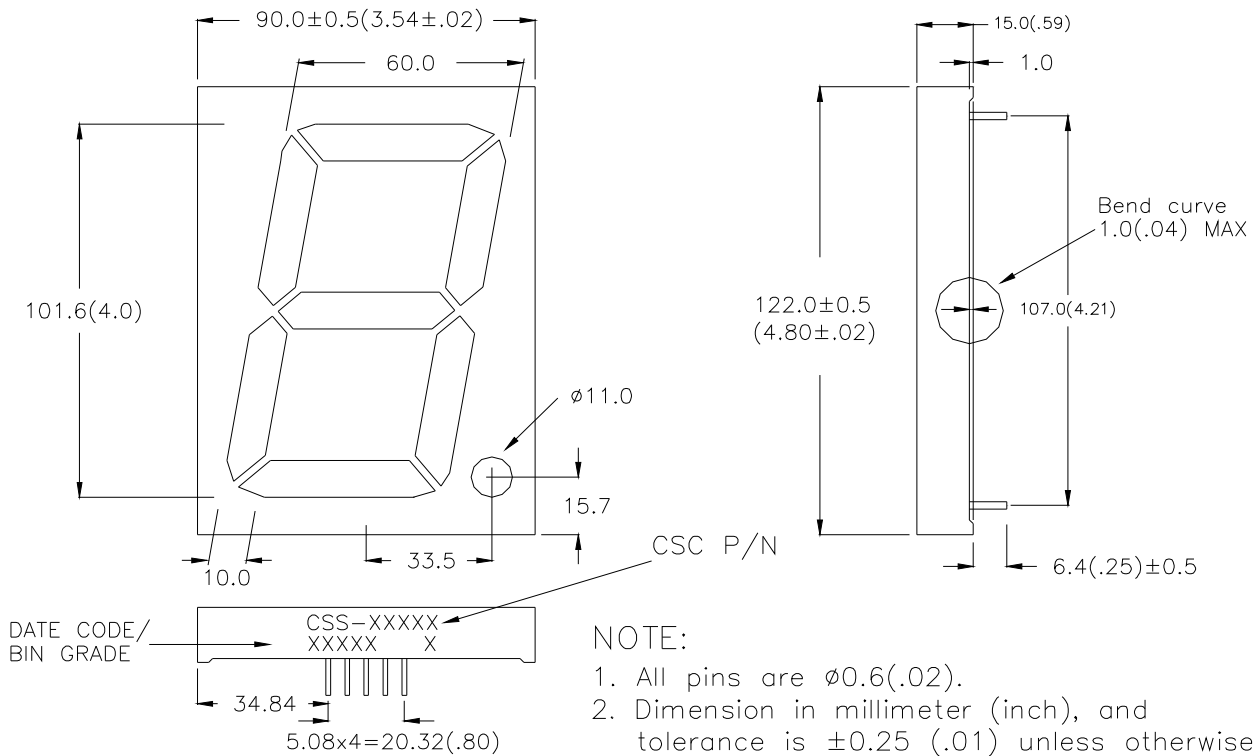
Features -

1. 4.0 inch (101.6mm) 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-4012V9	AlGaInP	Super Bright Orange	Common Anode
CSS-4013V9	AlGaInP	Super Bright Orange	Common Cathode

Mechanical Dimensions -



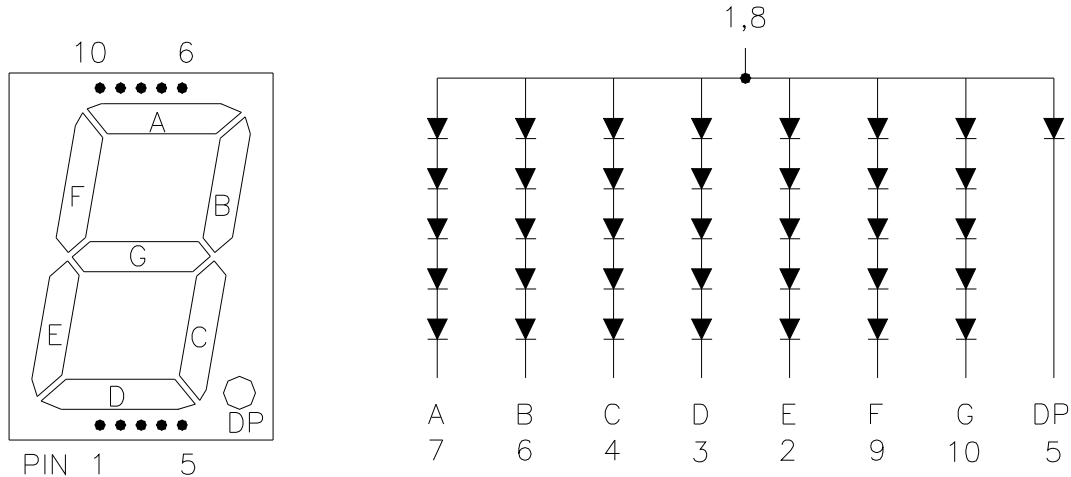
NOTE:

1. All pins are $\phi 0.6$ (.02).
2. Dimension in millimeter (inch), and tolerance is ± 0.25 (.01) unless otherwise noted.



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Internal Circuit Diagrams -



CSS-4012 Common Anode
(CSS-4013 Common Cathode.)

Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	Pd	70	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice(Duty cycle 1/10,1KHz)	IPF	90	mA
Continuous Forward Current Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temperature	Topr	-35 ~ +85	°C
Storage Temperature	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 (DP)	V _F	-	10(2.0)	14(2.8)	V	I _F =20mA
Luminous Intensity Per Segment	I _v	-	90	-	ucd	I _F =10mA
Peak Emission Wavelength	λ _P	-	632	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	624	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	I _F =20mA
Reverse Current	I _R	-	-	100	μA	V _R =25V
Luminous Intensity Matching Ratio	I _{V-m}	-	-	2:1	-	I _F =10mA



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

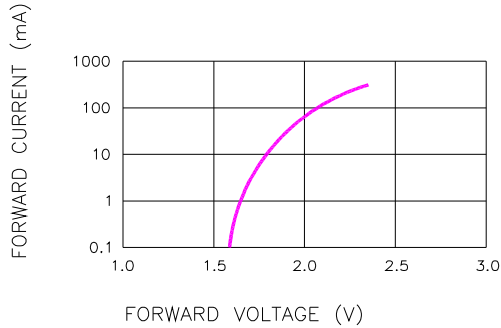


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

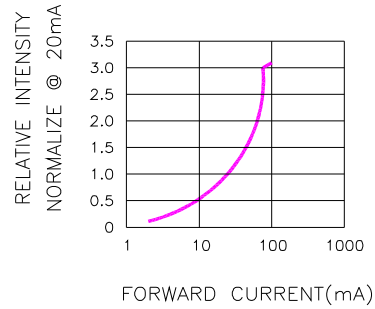


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

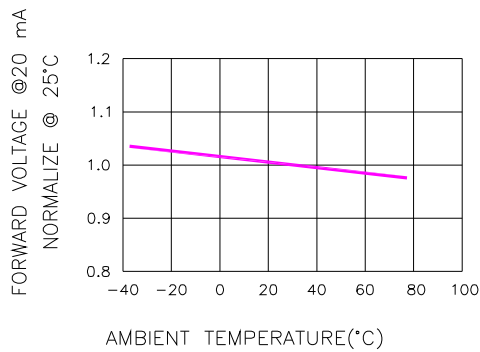


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

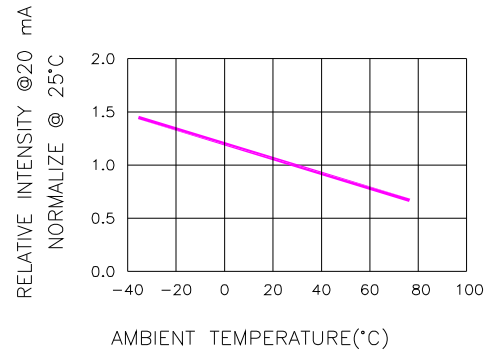


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

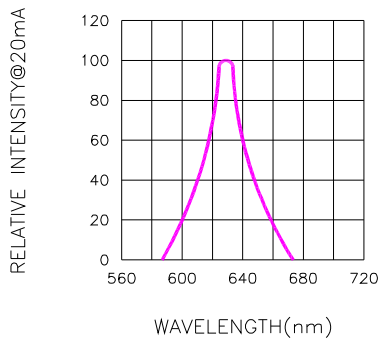


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

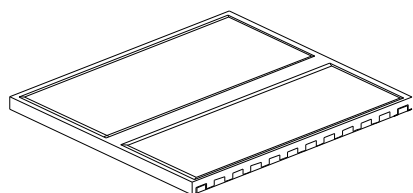


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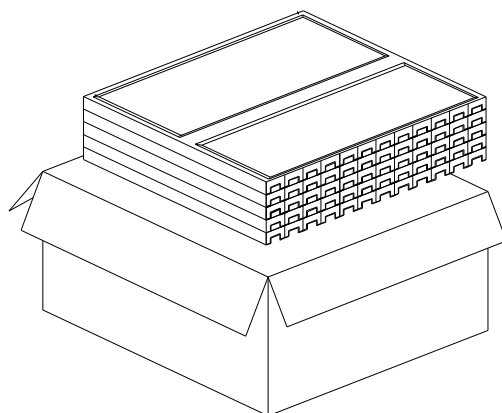
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■ Package Dimensions

CSS-401XX SINGLE DIGIT Display
Dice Code

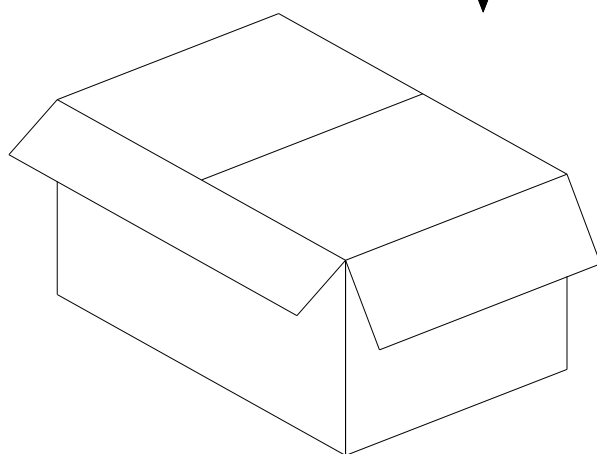


2pcs per polyform



41 polyforms per inner box
TOTAL Q'TY: 82 PCS.

INNER BOX SIZE:
L445xW360xH262mm



2 inner boxes per carton
TOTAL Q'TY: 164 PCS.

CARTON SIZE:
L460xW378xH558mm

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

<http://www.csctw.com.tw>