



PRODUCT SPECIFICATION

Model No.: CSDS-1A102V

Descriptions:

- 1.0 Inch Single Digit Display
- Common Anode
- Emitting Color: Super Bright Orange
- Black Face
- White Segment



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			

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., Shaoxing,
ZheJiang, China

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



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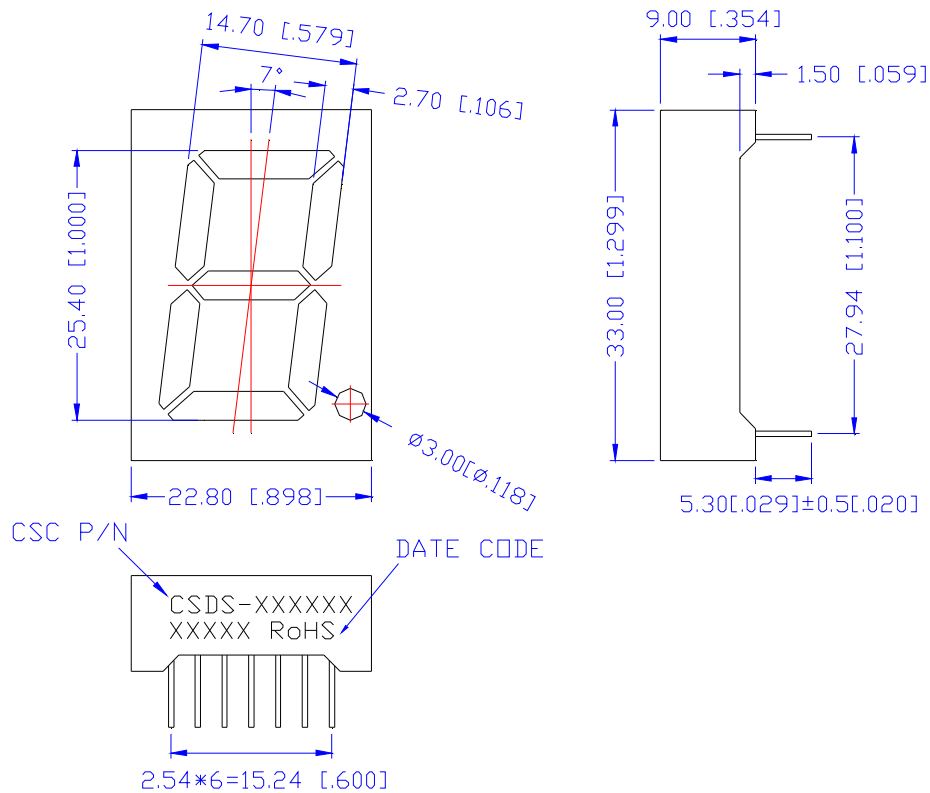
Features -

1. 1.0 inch (25.40mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Standard: black face, white segment.
6. Easy mounting on P.C. board or socket.

Device Selection Guide -

Model No.	Chip		Description
	Material	Emitting Color	
CSDS-1A102V	AlGaInP	Super Bright Orange	Common Anode

Mechanical Dimensions -



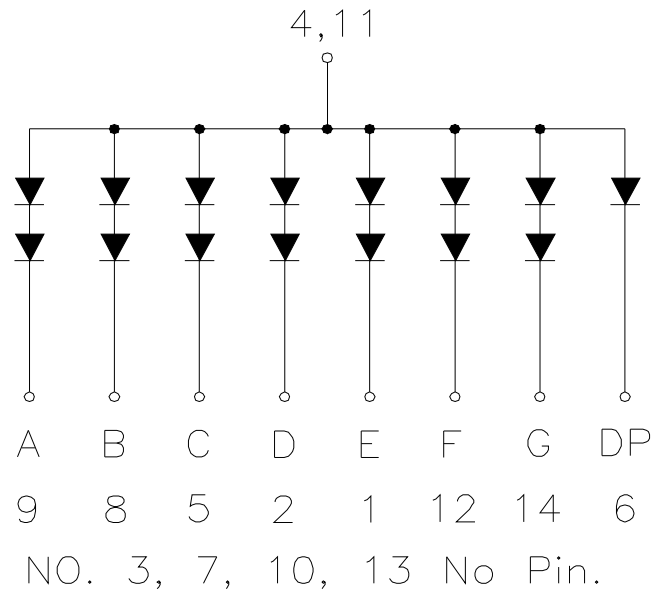
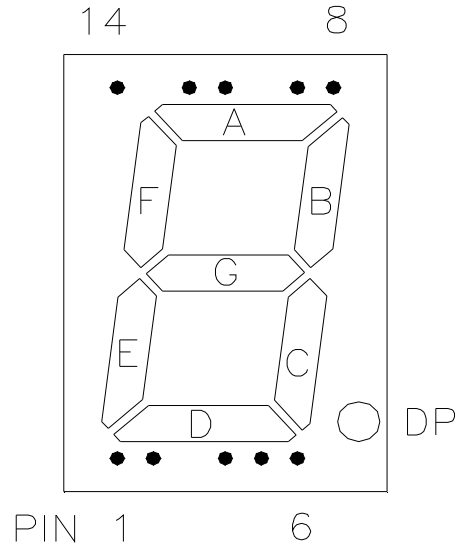
Notes:

1. All pins are $\phi 0.50$ [0.020]
2. Dimension in millimeter [inch], tolerance is ± 0.25 [0.010] and angle is $\pm 1^\circ$ unless otherwise noted.
3. Bending \leq Length * 1%.



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Internal Circuit Diagrams -





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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P_{AD}	70	mW
Derating Liner from 25°C per Dice	-	0.33	mA/°C
Continuous Forward Current Per Dice	I_{AF}	25	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	I_{PF}	90	mA
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	Tstg	-35 ~ +85	°C

■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment(DP)	V_F	-	4.0(2.0)	5.6(2.8)	V	I _F =20mA
Luminous Intensity Per Segment	I_v	40	120	-	mcd	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	Δ λ	-	20	-	nm	I _F =20mA
Reverse Current(DP)	I_R	-	-	100	μA	VR=10V(5V)
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	I _F =10mA



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

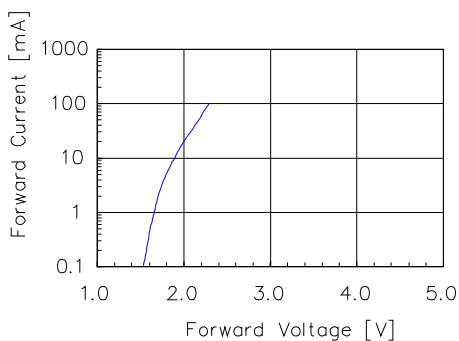


Fig 1. Forward Current vs. Forward Voltage

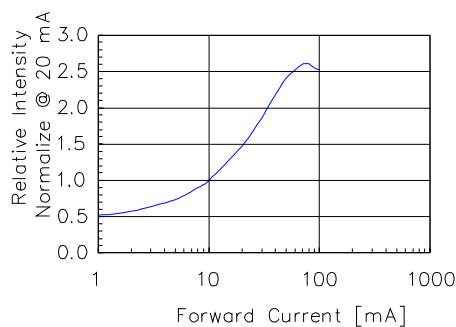


Fig 2. Relative Intensity vs. Forward Current

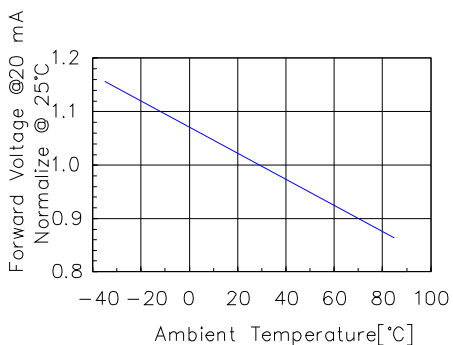


Fig 3. Forward Voltage vs. Temperature

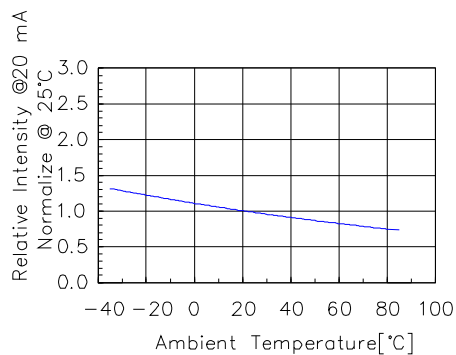


Fig 4. Relative Intensity vs. Temperature

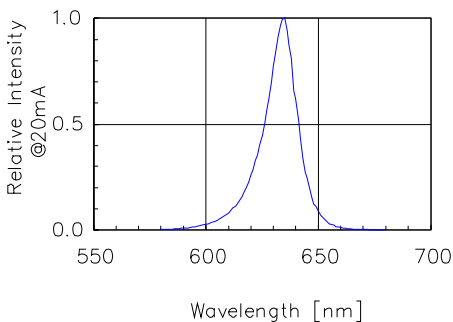


Fig 5. Relative Intensity vs. Wavelength

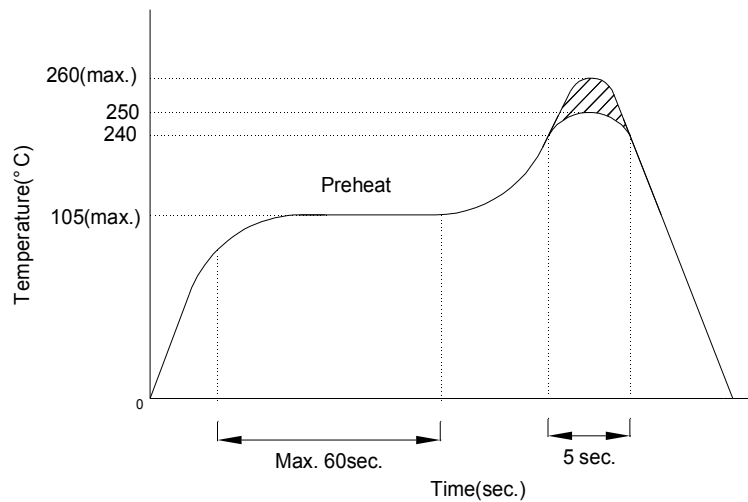


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■ Precautions For Use -

1. Recommended Soldering conditions

Wave Soldering



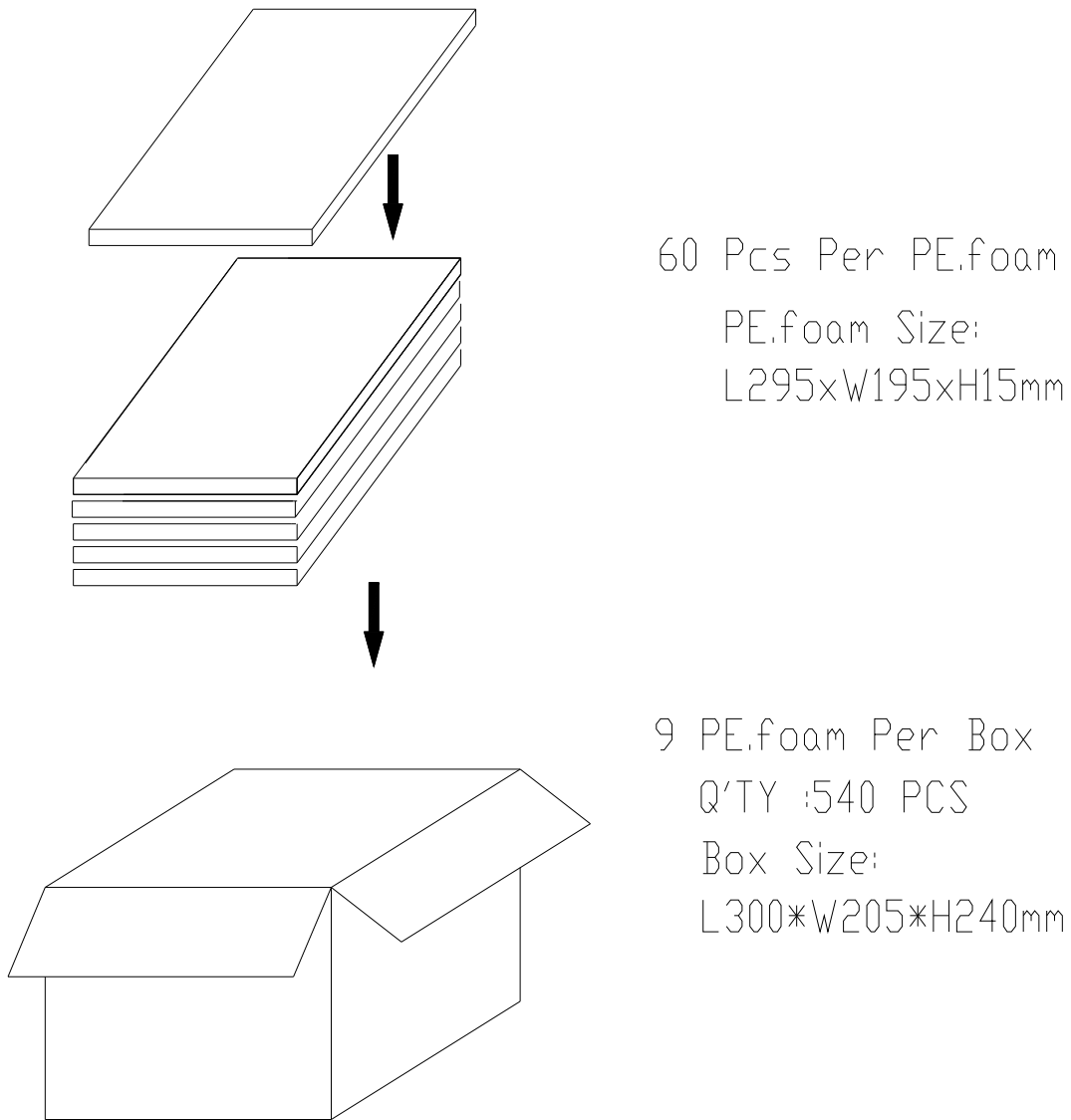
2. Soldering Iron

Basic SPEC. is $\leq 5\text{sec.}$ When 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec.}$). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C .



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■ Package Dimensions



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