



PRODUCT SPECIFICATION

Model No.: CSDS-2D101B

Descriptions:
<ul style="list-style-type: none"> ■ 2.3 Inch Single Digit Display ■ Common Cathode ■ Emitting Color: Super Bright Blue ■ Black Face ■ White Segment



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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



Spec. No.	PS-DS-2D101B
Rev.	A

Model No.: CSDS-2D101B

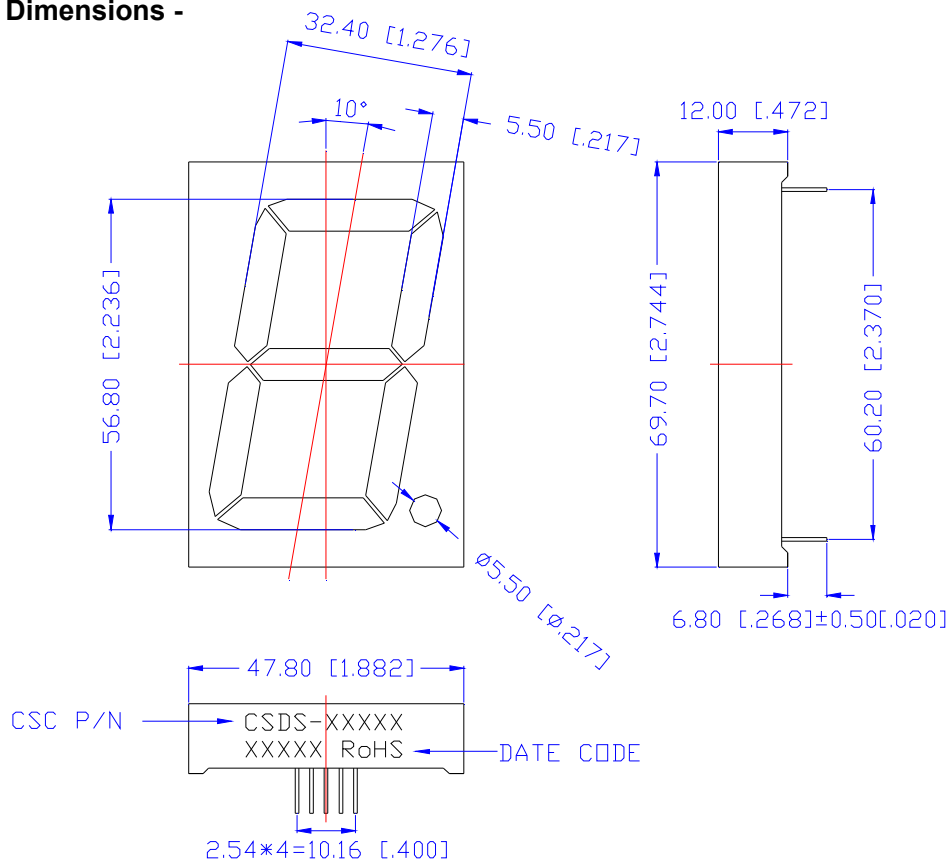
Features -

1. 2.3 inch (56.80mm) 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-2D101B	InGaN	Super Bright Blue	Common Cathode

Mechanical Dimensions -



Notes:

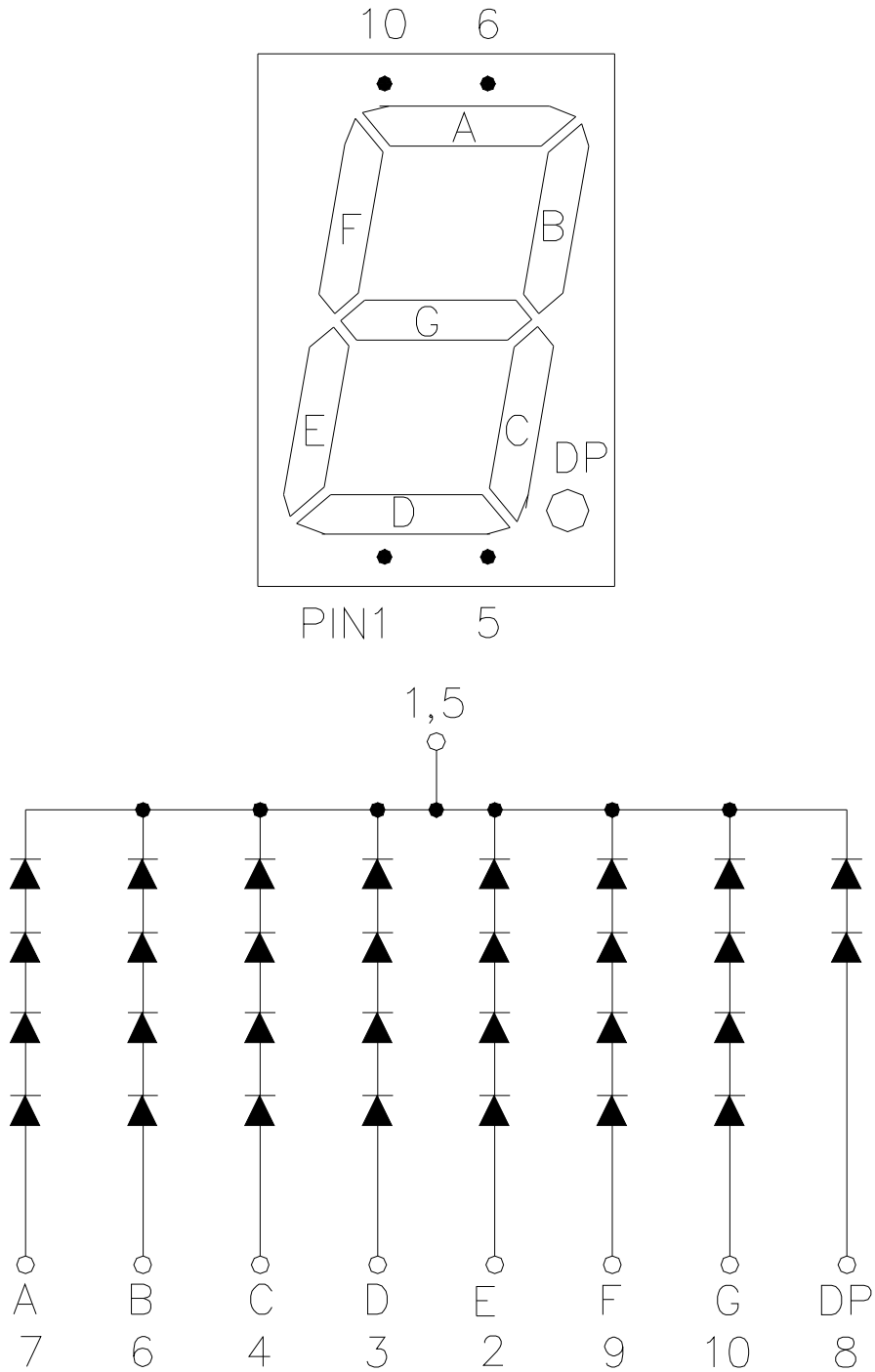
1. All pins are $\varnothing 0.60$ [0.024]
2. Dimension in millimeter [inch], tolerance is ± 0.25 [0.010] and angle is $\pm 1^\circ$ unless otherwise noted.
3. Bending \leq Length * 1%.



Spec. No.	PS-DS-2D101B
Rev.	A

Model No.: CSDS-2D101B

Internal Circuit Diagrams -





Model No.: CSDS-2D101B

■ **Absolute Maximum Rating -**

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P _{AD}	114	mW
Derating Liner from 25°C per Dice	-	0.4	mA/°C
Continuous Forward Current Per Dice	I _{AF}	30	mA
Peak Current Per Dice(duty cycle 1/10,1KHz)	I _{PF}	100	mA
Reverse Voltage Per Dice	VR	5	V
Electrostatic discharge(HBM)	ESD	1	KV
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	-	12.8(6.4)	15.2(7.6)	V	I _F =20mA
Luminous Intensity Per Segment	I _v	30	80	-	mcd	I _F =10mA
Peak Emission Wavelength	λ _P	-	468	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	470	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ	-	30	-	nm	I _F =20mA
Reverse Current(DP)	I _R	-	-	50	μA	VR=20V(10V)
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	I _F =10mA



Model No.: CSDS-2D101B

Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

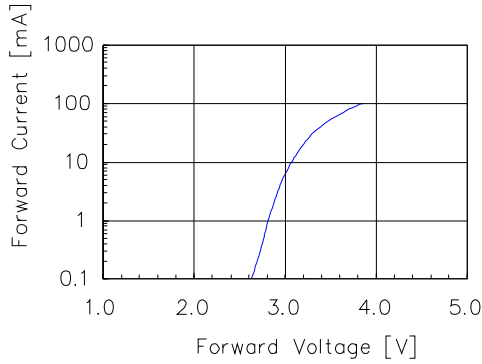


Fig 1. Forward Current vs. Forward Voltage

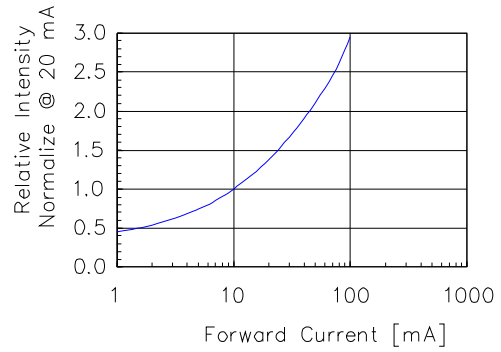


Fig 2. Relative Intensity vs. Forward Current

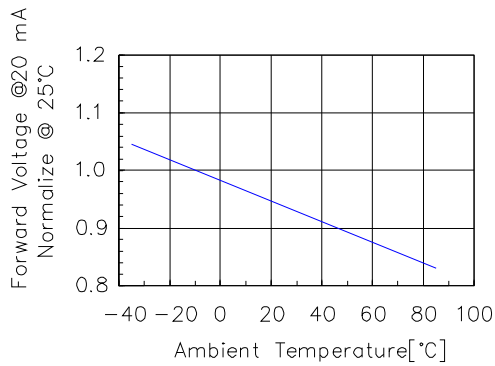


Fig 3. Forward Voltage vs. Temperature

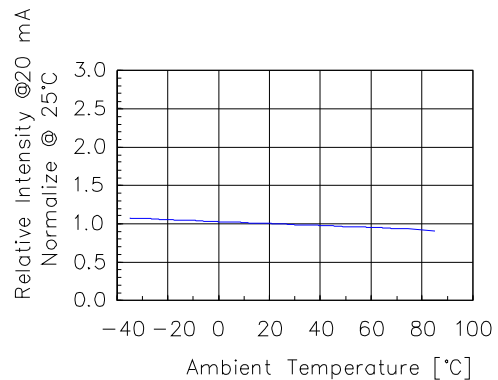


Fig 4. Relative Intensity vs. Temperature

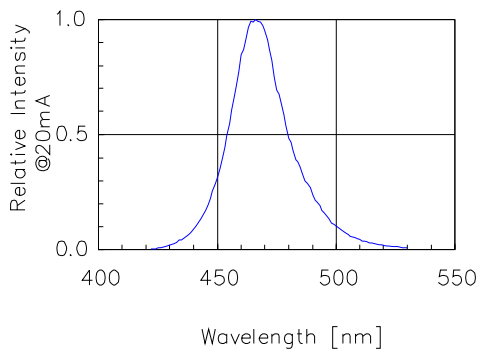


Fig 5. Relative Intensity vs. Wavelength



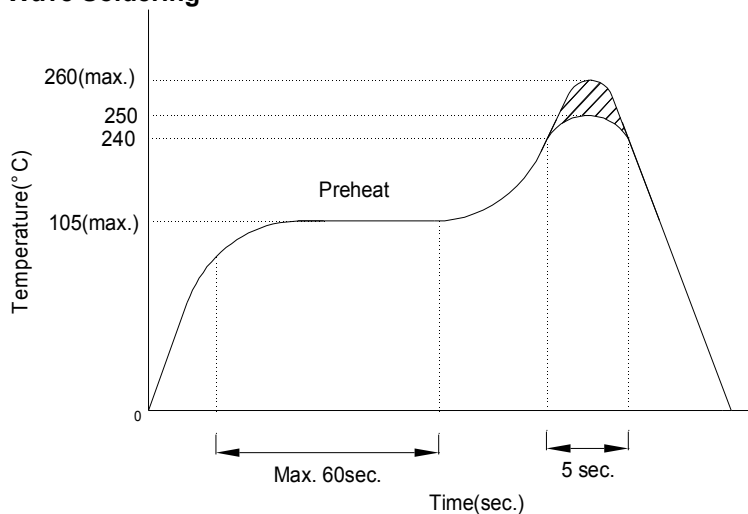
Spec. No.	PS-DS-2D101B
Rev.	A

Model No.: CSDS-2D101B

■ Precautions For Use -

1. Recommended Soldering conditions

Wave Soldering



2. Soldering Iron

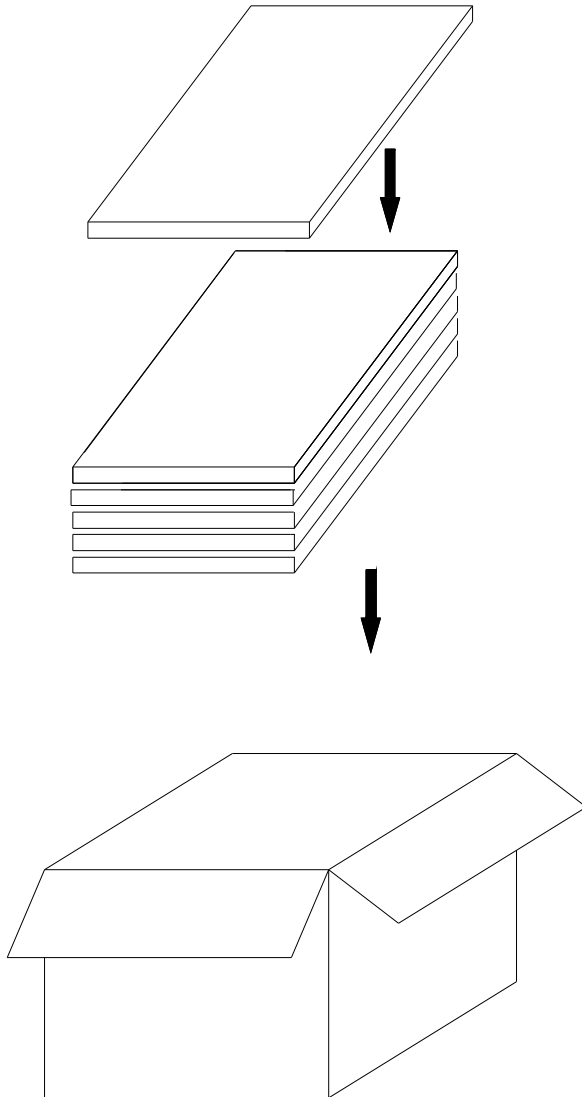
Basic SPEC. is ≤ 5 sec. When 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1$ sec.). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C .



Spec. No.	PS-DS-2D101B
Rev.	A

Model No.: CSDS-2D101B

■ Package Dimensions



12 Pcs Per PE.foam
PE.foam Size:
L295xW195xH15mm

8 PE.foam Per Box
Q'TY :96 PCS
Box Size:
L300*W205*H240mm

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