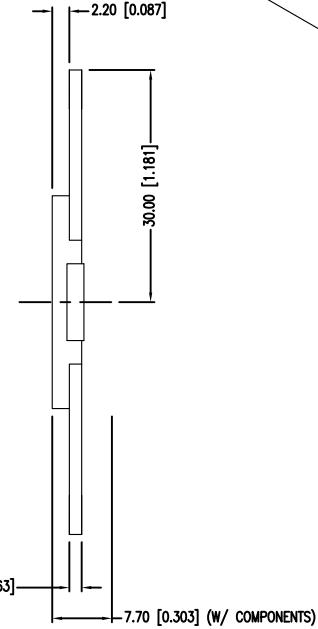
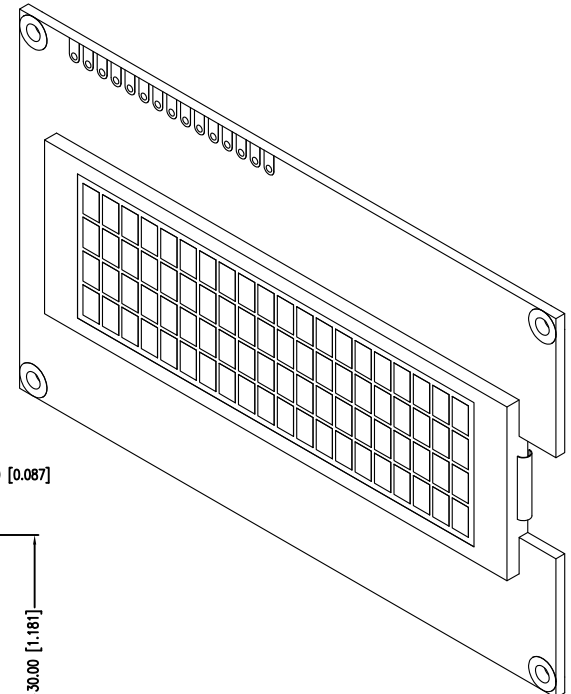
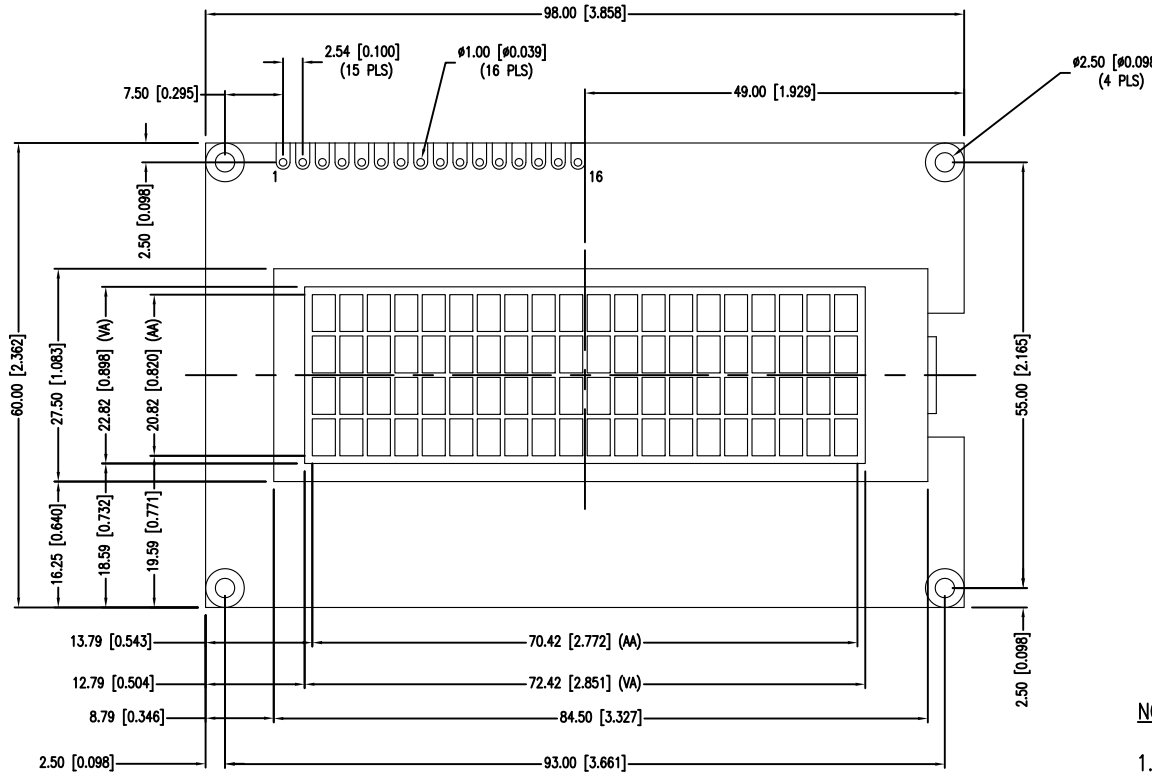


CHARACTER DETAIL  
SCALE: 5:1



NOTES:

1. BLACK BACKGROUND.
2. PIXEL COLOR GREEN.
3. MINIMUM VIEWING ANGLE OF 65° FROM 12,3,6,9, 0'CLOCK.
4. WISECHIP SEMI US2066 CONTROLLER.

**CAUTION: STATIC SENSITIVE DEVICE**  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION

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20 X 4 OLED DISPLAY MODULE, GREEN CHARACTERS

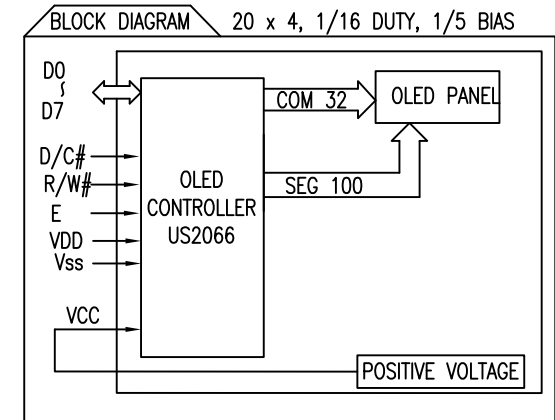
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DATE:	05.21.15	DRAWN BY:	MJK
PAGE:	1 OF 2	CHKD BY:	--
SCALE:	NTS	APRVD BY:	--
UNIT:	mm [INCH]		Ⓟ

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	DESCRIPTION
1	V <sub>SS</sub>	0V	SUPPLY VOLTAGE FOR LOGIC GROUND
2	V <sub>DD</sub>	5.0V	SUPPLY VOLTAGE FOR LOGIC
3	NC	-	-
4	RS	H/L	H:DATA, L: INSTRUCTION CODE
5	R/W	H/L	H:READ (MPU-->MODULE);L:WRITE(MPU-->MODULE)
6	E	H,H->L	CHIP ENABLE SIGNAL
7	DB0	H/L	DATA BIT 0
8	DB1	H/L	DATA BIT 1
9	DB2	H/L	DATA BIT 2
10	DB3	H/L	DATA BIT 3
11	DB4	H/L	DATA BIT 4
12	DB5	H/L	DATA BIT 5
13	DB6	H/L	DATA BIT 6
14	DB7	H/L	DATA BIT 7
15	V <sub>CC</sub>	12.0V	SUPPLY VOLTAGE FOR PANEL(POSITIVE VOLTAGE OUTPUT): PLEASE NC
16	NC	-	-



ELECTRICAL/OPTO CHARACTERISTICS

V<sub>DD</sub>=5V , T<sub>A</sub>=25°C, 60% RH, V<sub>CC</sub>=12.0V

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	-	4.7		5.3	V
SUPPLY VOLTAGE FOR PANEL	V <sub>CC</sub> -V <sub>SS</sub>	-	11.5	12.0	12.5	V
INPUT VOLTAGE	HIGH	V <sub>IH</sub>	0.8V <sub>DD</sub>	-	V <sub>DD</sub>	V
	LOW	V <sub>IL</sub>	0	-	0.2V <sub>DD</sub>	V
OUTPUT VOLTAGE	HIGH	V <sub>OH</sub>	0.9V <sub>DD</sub>	-	V <sub>DD</sub>	V
	LOW	V <sub>OL</sub>	0	-	0.1V <sub>DD</sub>	V
OLED DRIVING CURRENT	I <sub>DD</sub>	-	60	-	-	mA
VIEW ANGLE				FREE		
DARK ROOM CONTRAST				>10000:1		
C.I.E. (C.I.E. 1931)	X		0.25	0.29	0.33	
	Y		0.62	0.66	0.73	
RESPONSE TIME					30	ns
BRIGHTNESS W/POLARIZER			80	100		cd/m <sup>2</sup>

\*BRIGHTNESS=80cd/m<sup>2</sup> , T<sub>a</sub>=25°C, 60% RH, V<sub>DD</sub>=5.0V, V<sub>CC</sub>=12.0V, 100% DISPLAY AREA TURN ON.

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	2.4	5.5	V
SUPPLY VOLTAGE FOR PANEL	V <sub>CC</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	11.5	12.5	V
HUMIDITY				85	%
OPERATING TEMPERATURE*	T <sub>opr</sub>		-40	80	°C
STORAGE TEMPERATURE	T <sub>stg</sub>		-40	90	°C

OPERATING LIFE 50,000 HRS  
END OF LIFE IS SPECIFIED AS 50 %OF INITIAL BRIGHTNESS

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION



20 X 4 OLED DISPLAY, GREEN CHARACTERS

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PAGE: 2 OF 2	CHKD BY: --
SCALE: NTS	APRVD BY: --
UNIT: mm [INCH]	Ⓟ