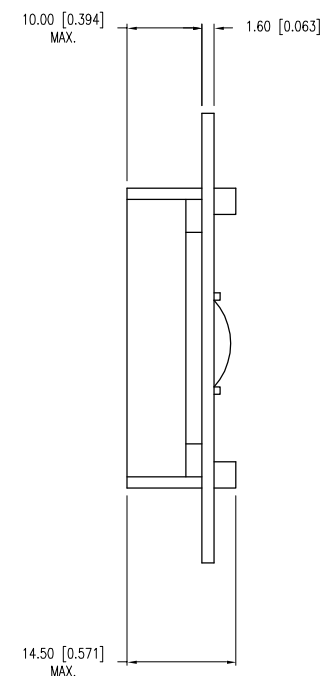
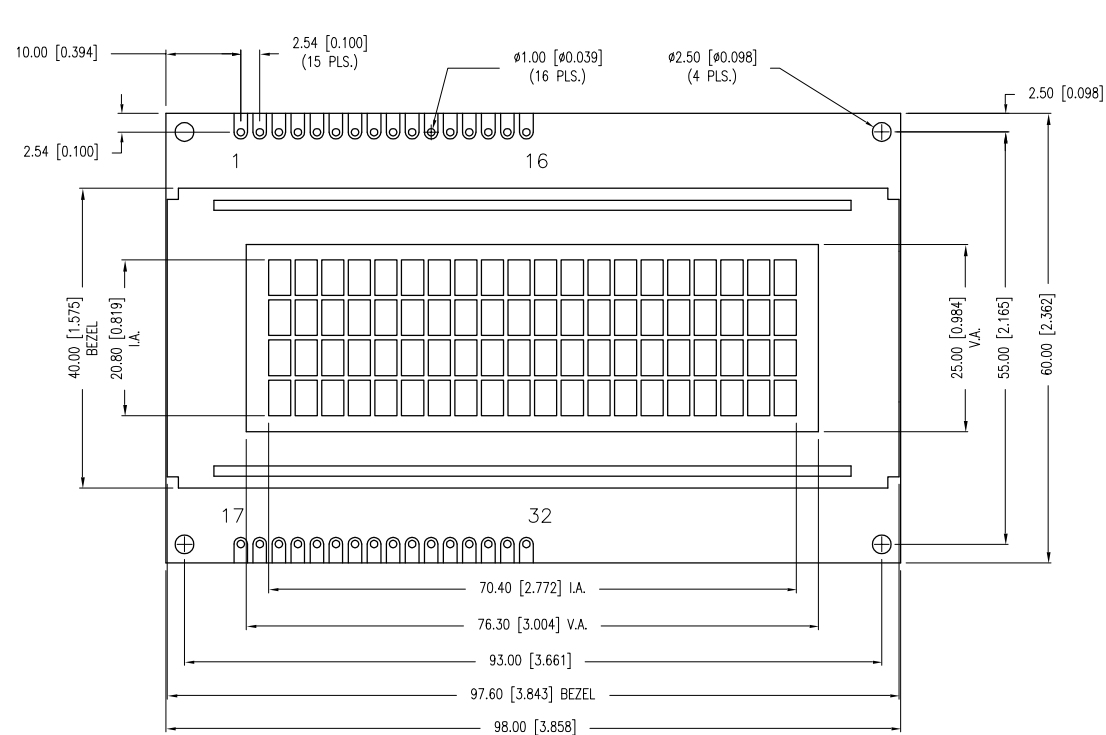
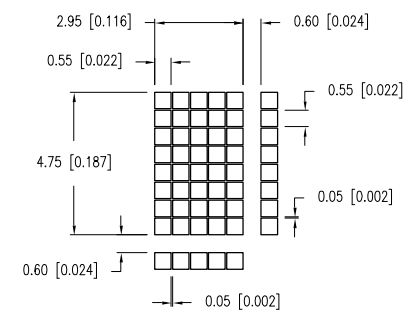




CHARACTER DETAIL



*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 -0.00 MAX.= +0.00 -DECIMAL PRECISION

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20 x 4 CHARACTER LCD MODULE, STN YELLOW, TRANSFLECTIVE, LED BACKLIGHT, 6:00 VIEW.

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

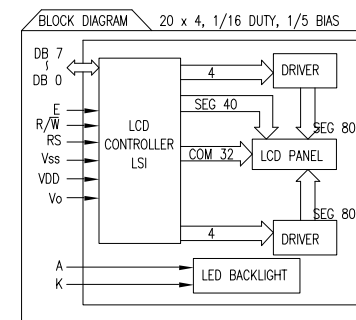
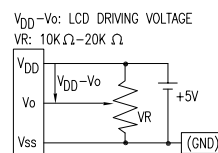
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DATE:	03.18.10	DRAWN BY:	JN
PAGE:	1 OF 2	CHKD BY:	BC
SCALE:	N/A	APRVD BY:	YA
UNIT:	mm [INCH]		(P)

UNCONTROLLED DOCUMENT

PIN CONFIGURATION				
PIN NO.	SYMBOL	LEVEL	FUNCTION	
1, 17	V _{SS}	—	POWER SUPPLY FOR LCD DRIVE	GND (0V)
2, 16	V _{DD}	—		5V
3, 17	V _O	—		
4, 18	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT	
5, 19	R/ $\bar{W}$	H/L	H: DATA READ (MODULE→MPU) L: DATA WRITE (MODULE←MPU)	
6, 20	E	H,H→L	ENABLE	
7~14/21~30	DB0~DB7	H/L	DATA BUS—SOFTWARE SELECTABLE 4 OR 8 BIT MODE.	
15, 31	A	—	ANODE	LED BACKLIGHT
16, 32	K	—	CATHODE	LED BACKLIGHT



ELECTRICAL CHARACTERISTICS		V _{DD} =4.7V to 5.3V, T _A =25°C					
ITEM		SYMBOL	CONDITION	STANDARD VALUE			UNIT
				MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC		V _{DD} -V _{SS}	—	—	5.0	—	V
SUPPLY CURRENT FOR LOGIC		I _{DD}	V _{DD} =5V	—	2.0	3.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	—	2.2	—	V _{DD}	V
	LOW	V _{IL}	—	0	—	0.6	V
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-0.205mA	2.4	—	—	V
	LOW	V _{OL}	I _{OL} =1.6mA	—	—	0.4	V
LED BACKLIGHT	VOLTAGE	V _f	I _f =300mA	—	4.2	4.5	V
	CURRENT	I _f	—	—	300	600	mA
	POWER CONSUMPTION	P _D	—	—	1260	—	mW
	LUMINOUS	L	I _f =300mA	70	—	—	cd/m ²
	COLOR	—	—	—	—	—	nm

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	MIN	MAX	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	—	4.7	5.3	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	—	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	—	-30	80	°C

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