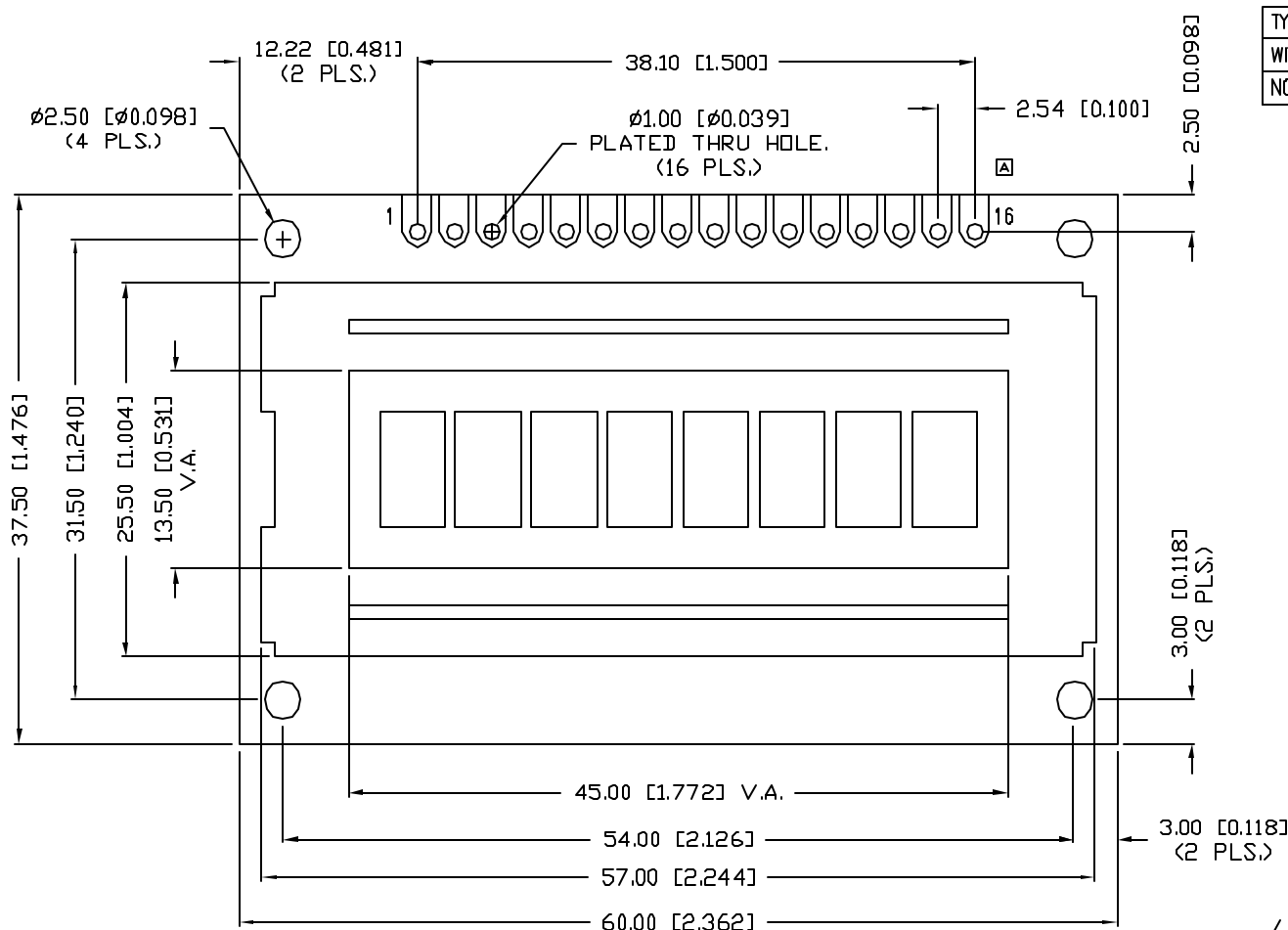


UNCONTROLLED DOCUMENT

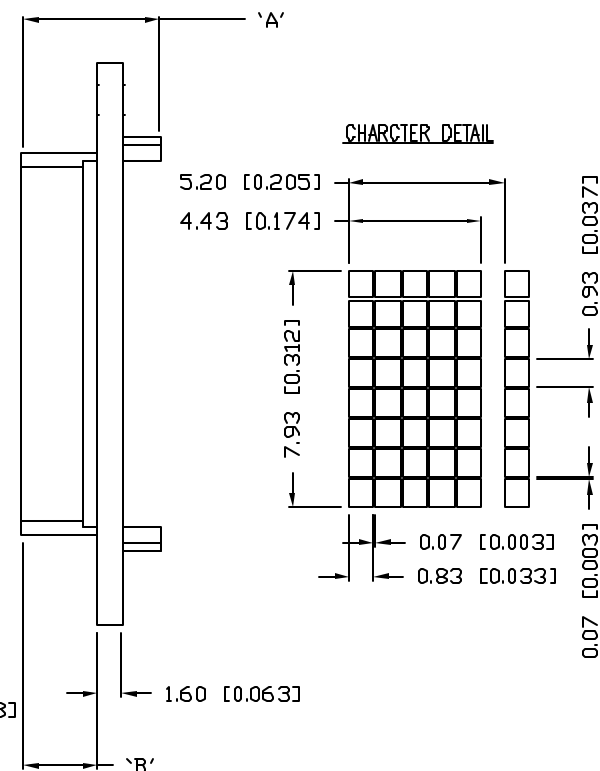
LCM-X		DXX	DESCRIPTION
STANDARD	S	SR	STN, REFLECTIVE
		SF	STN, TRANSFLECTIVE(W/ BACKLIGHT)
HIGH TEMP.	H	TR	TN, REFLECTIVE
		TF	TN, TRANSFLECTIVE(W/ BACKLIGHT)

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

PART NUMBER		REV.
LCM-X00801DXX-Y		A
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #11237.	4.22.05



TYPE	DIM.	A	B
WITH BACKLIGHT		13.0	9.0
NO BACKLIGHT		9.1	5.0



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*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.=+0.00 DECIMAL PRECISION MAX.=−0.00 DECIMAL PRECISION

REV. A	PART NUMBER LCM-X00801DXX-Y	CONFIDENTIAL INFORMATION THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES. RELIABILITY NOTE OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.	LUMEX INCORPORATED 290 E. HELLEN ROAD PALATINE, ILLINOIS 60067 PHONE: (847) 359-2790 WEB: http://www.lumex.com
7.93mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, B x 1 LCD MODULE, 1/8 DUTY, 1/5 BIAS, STN YELLOW.		SA/BC	DRAWN BY: CHECKED BY: APPROVED BY: DATE: 12.15.00 PAGE: 1 OF 2 SCALE: N/A

UNCONTROLLED DOCUMENT

PART NUMBER
LCM-X00801DXX-YREV.
A

REV. E.C.N. NUMBER AND REVISION COMMENTS

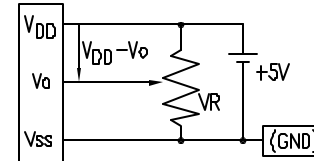
DATE

SEE PAGE 1.

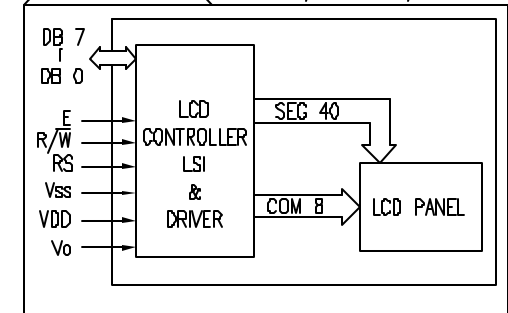
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	-	POWER SUPPLY GND (0V)
2	V _{DD}	-	
3	V _O	-	
4	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT
5	R/W	H/L	H: DATA READ (MODULE-->MPU) L: DATA WRITE (MODULE<--MPU)
6	E	H,H->L	ENABLE
7~14	DB0~DB7	H/L	DATA BUS-SOFTWARE SELECTABLE 4 OR 8 BIT MODE.
15	A	-	ANODE LED BACKLIGHT
16	K	-	CATHODE LED BACKLIGHT

V_{DD}-V_O: LCD DRIVING VOLTAGE
VR: 10K Ω - 20K Ω



BLOCK DIAGRAM 8 x 1, 1/8 DUTY, 1/5 BIAS



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	—	4.7	V
		LOW	V_{IL}	—	0	—	0.6	V
OUTPUT VOLTAGE		HIGH	V_{OH}	—	2.4	—	—	V
		LOW	V_{OL}	—	—	—	0.4	V
*LED BACKLIGHT	VOLTAGE		V_f	$I_f=70mA$	—	4.2	4.5	V
	CURRENT		I_f	—	—	70	110	mA
	POWER CONSUMPTION		P_D	—	—	315	—	mW
	LUMINOUS		L	$I_f=70mA$	70	—	—	cd/m ²
	COLOR		—	—	—	—	—	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-	4.2 ^{+0.50°C}	4.8 ^{+0.0°C}	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-S	0	50	°C
		LCM-H	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-S	-20	70	°C
		LCM-H	-30	85	°C

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REV.

A

PART NUMBER

LCM-X00801DXX-Y

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PAGE: 2 OF 2

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