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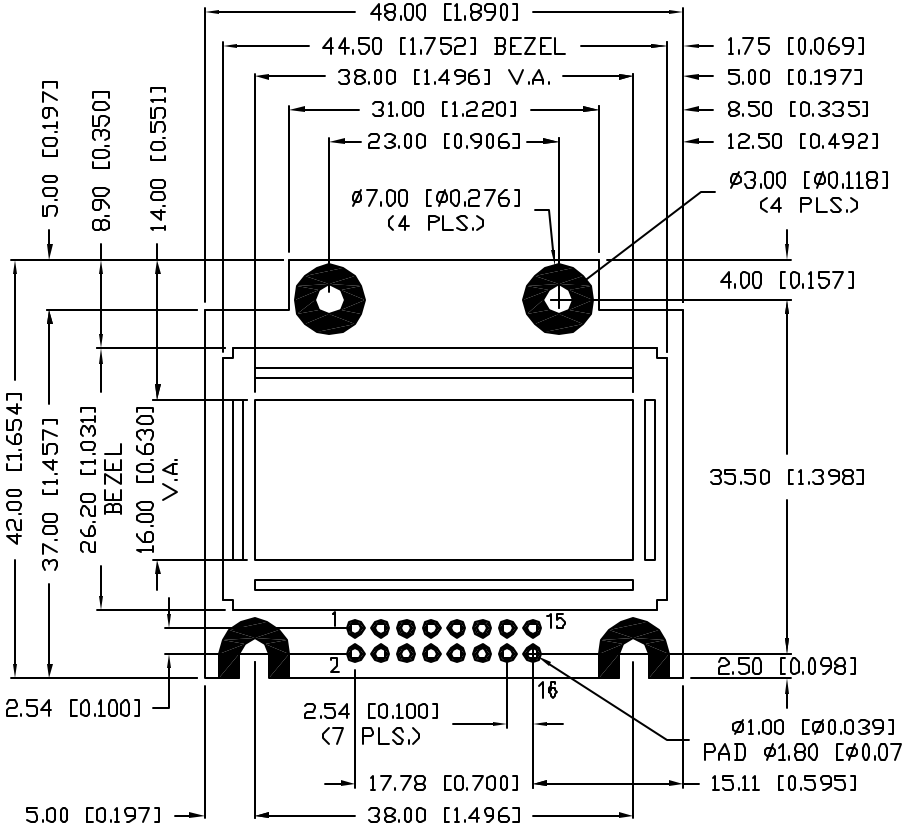
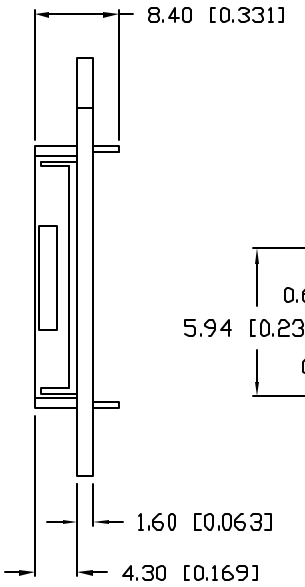
CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

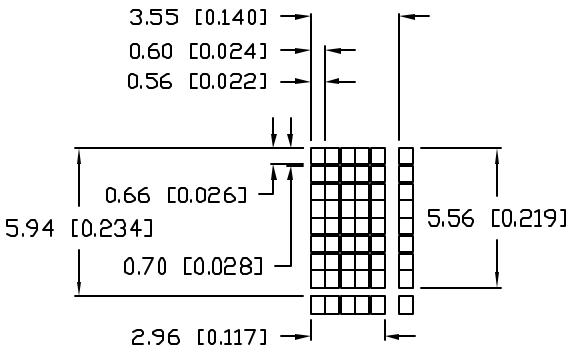
PART NUMBER	REV.
LCM-X00802DXX/A	



P/N PREFIX/SUFFIX TABLE			
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)



PIXEL DETAIL



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REV.	PART NUMBER	CONFIDENTIAL INFORMATION	LUMEX	290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw
	LCM-X00802DXX/A	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.		

8 x 2 CHARACTER MODULE, 1/16 DUTY.
5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX.

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.

DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE: 8.27.03 PAGE: 1 OF 2 SCALE: N/A
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PART NUMBER
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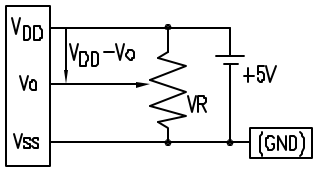
REV.

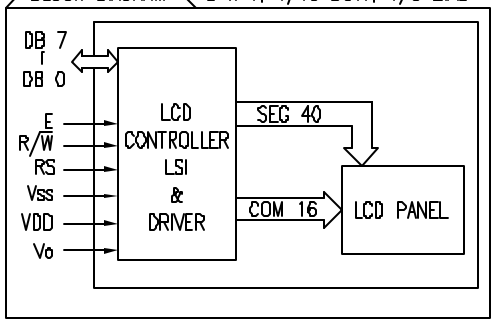
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	Vss	–	SUPPLY GROUND
2	DB0	H/L	DATA BIT 0
3	K	–	LED BACKLIGHT CATHODE
4	DB1	H/L	DATA BIT 1
5	V_{DD}	5V	SUPPLY VOLTAGE
6	DB2	H/L	DATA BIT 2
7	Vo	–	CONTRAST ADJUST
8	DB3	H/L	DATA BIT 3
9	A	–	LED BACKLIGHT ANODE
10	DB4	H/L	DATA BIT 4
11	E	H,H->L	ENABLE SIGNAL
12	DB5	H/L	DATA BIT 5
13	R/W	H/L	H: DATA READ (MODULE-->MPU) L: DATA WRITE (MODULE<--MPU)
14	DB6	H/L	DATA BIT 6
15	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT
16	DB7	H/L	DATA BIT 7

V_{DD}-Vo: LCD DRIVING VOLTAGE
VR: 10KΩ -20KΩ



BLOCK DIAGRAM 8 x 1, 1/16 DUTY, 1/5 BIAS



ELECTRICAL CHARACTERISTICS

V_{DD}=4.7V to 5.3V, T_A=25°C

ITEM		SYMBOL	CONDITION	STANDARD VALUE MIN.	TYP.	MAX.	UNIT
SUPPLY VOLTAGE FOR LOGIC		V_{DD}-Vss	–	–	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	Vf	If=70mA	–	4.2	4.5	V
	CURRENT	If	–	–	70	110	mA
	POWER CUNSUMPTION	PD	–	–	315	–	mW
	LUMINOUS	L	If=70mA	70	–	–	cd/m²
	COLOR	–	–	–	–	–	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE MIN	MAX	UNIT
SUPPLY VOLTAGE FOR LOGIC	VDD-Vss	Ta=25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	VDD-Vo	–	4.2@50°C	4.8@0°C	V
INPUT VOLTAGE	V_I	Ta=25°C	Vss	V_{DD}	V
OPERATING TEMPERATURE	Topr	LCM-S	0	50	°C
		LCM-H	-20	70	°C
STORAGE TEMPERATURE	Tstg	LCM-S	-20	70	°C
		LCM-H	-30	85	°C

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