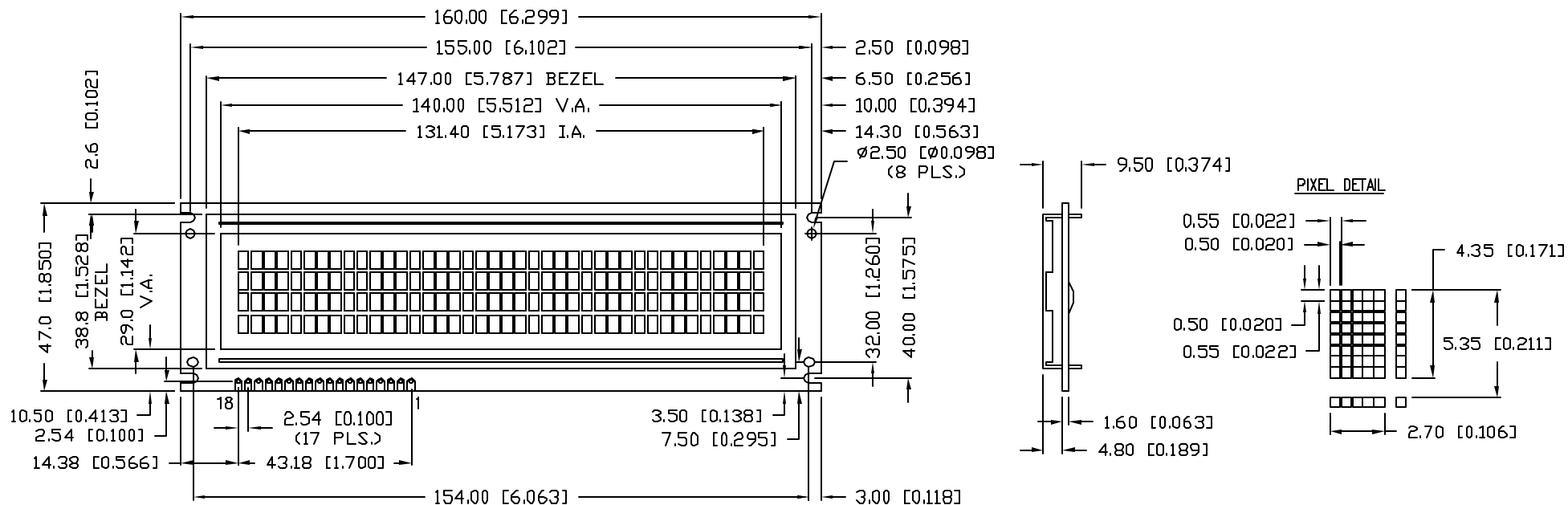


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.



P/N PREFIX/SUFFIX TABLE

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

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

REV.

PART NUMBER

LCM-X04004DXX/C

4.35mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
40 x 4 LCD CHARACTER MODULE, 1/16 DUTY.

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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.



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

GT

CHECKED BY:

APPROVED BY:

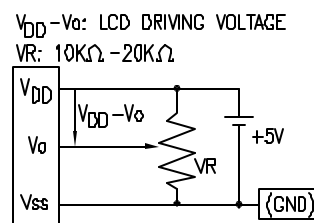
DATE: 8.26.03

PAGE: 1 OF 2

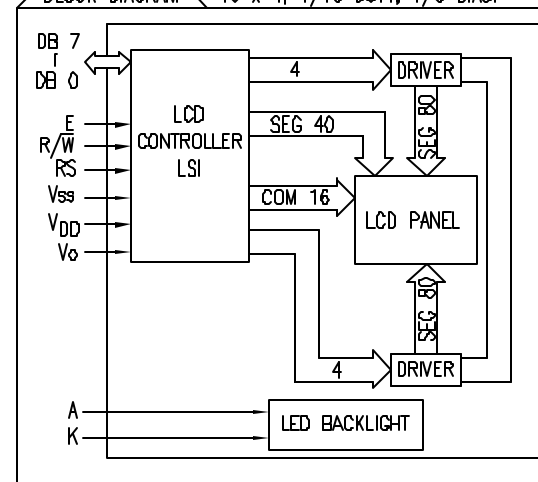
SCALE: N/A

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	—	POWER SUPPLY
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	E1	H,H->L	ENABLE 1
7	E2	H,H->L	ENABLE 2
8~15	DB0~DB7	H/L	DATA BUS—SOFTWARE SELECTABLE 4 OR 8 BIT MODE.
16	A	—	ANODE
17	K	—	CATHODE
18	NC	—	



BLOCK DIAGRAM 40 x 4, 1/16 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	—	5.2	10.8	mA
INPUT VOLTAGE	HIGH	V _{IH}	—	2.2	—	V _{DD}
		V _{IL}	—	0	—	0.6
OUTPUT VOLTAGE	HIGH	V _{OH}	—	2.4	—	V
		V _{OL}	—	—	—	0.4
*LED BACKLIGHT	VOLTAGE	V _f	—	—	4.2	4.6
	CURRENT	I _f	—	—	500	—
	POWER CONSUMPTION	P _D	—	—	2100	—
	LUMINOUS	L	I _f =500mA	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@50°C	4.8@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.

PART NUMBER

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SCALE: N/A

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