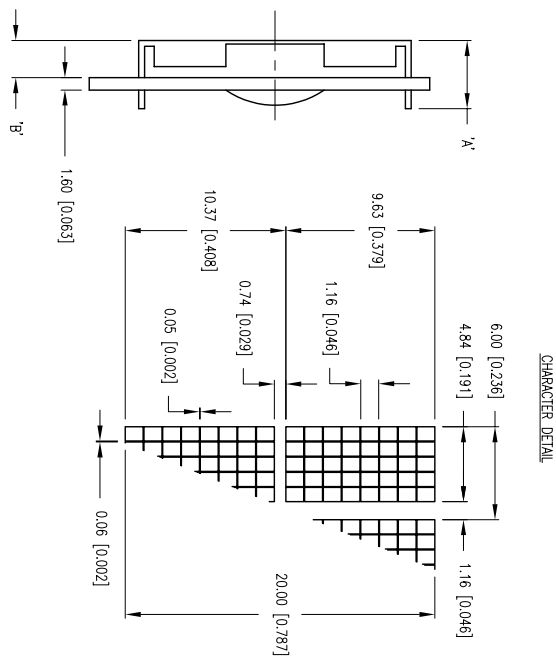
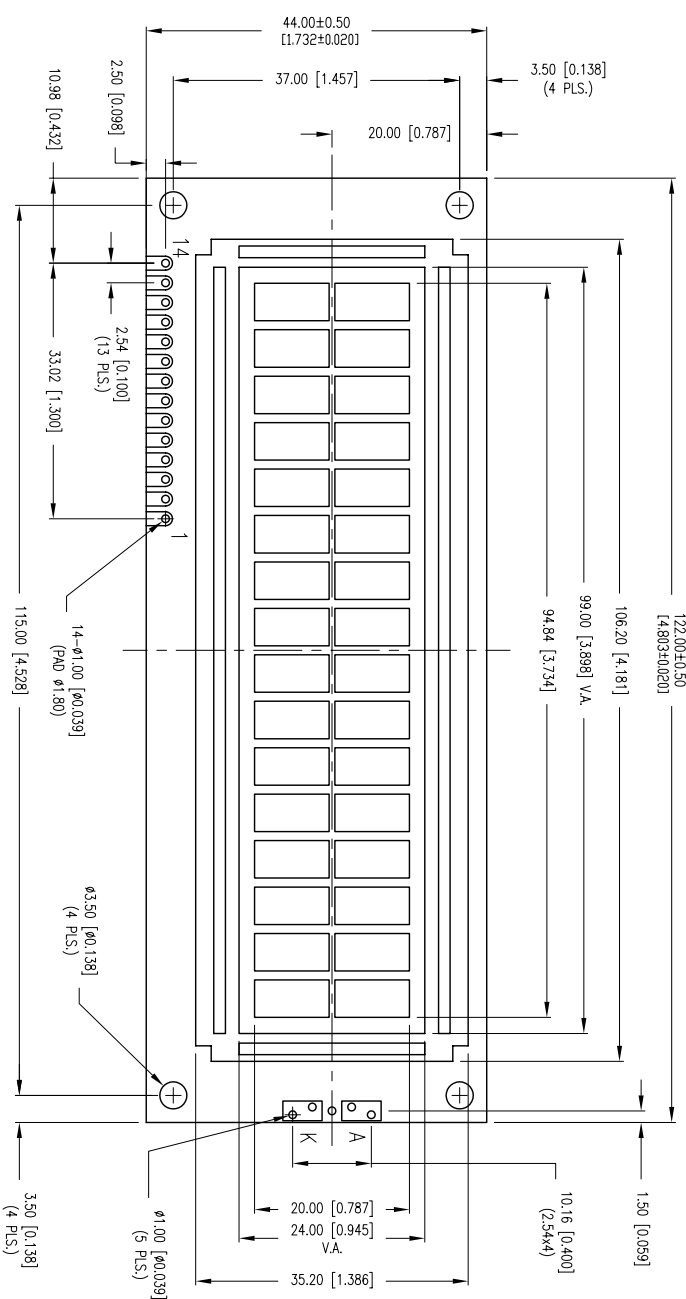


PART NUMBER	LCM-X01602DXX/D	REV.	A
DATE	10.09.98	REV.	A
E.C.N. #	10464	E.C.N. NUMBER AND REVISION COMMENTS	

P/N PREFIX/SUFFIX TABLE	
LCM-X	DIFF. DESCRIPTION
S	SR. S/N, REFLECTIVE
SF	S/N, TRANSPARENT(W/ BACKLIGHT)
TR	TN, REFLECTIVE
TF	TN, TRANSPARENT(W/ BACKLIGHT)

TYPE	DIM.	A	B
WITH BACKLIGHT	13.0	9.0	
NO BACKLIGHT	8.8	4.8	

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.= -0.000 (DECIMAL PRECISION MAX.= +0.000 (DECIMAL PRECISION))

LUMEX
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 FAX: +1.847.359.6538
 WEB: WWW.LUMEX.COM

9.63mm CHARACTER HEIGHT, 16x2 CHARACTERS, 5x8 DOT MATRIX LCD MODULE, 1/16 DUTY, 1/5 BIAS.
 THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT
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UNCONTROLLED DOCUMENT
 DATE: 01.28.11
 PAGE: 1 OF 2
 SCALE: NTS
 UNIT: mm [INCH]
 DRAWN BY: AB
 CHKD BY: YA
 APRVD BY: BC

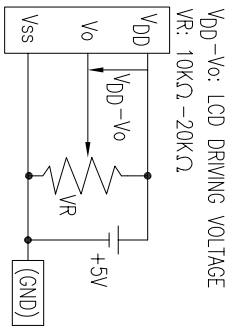
PART NUMBER	LCM-X01602DXX/D	REV.	A
DATE	10:09 98	REV.	A
E.C.N. NUMBER AND REVISION COMMENTS	E.C.N. #10464		

PIN CONFIGURATION			FUNCTION
PIN NO.	SYMBOL	LEVEL	GND (0V)
1	Vss	-	POWER SUPPLY 5V FOR LCD DRIVE
2	VDD	-	
3	Vo	-	
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

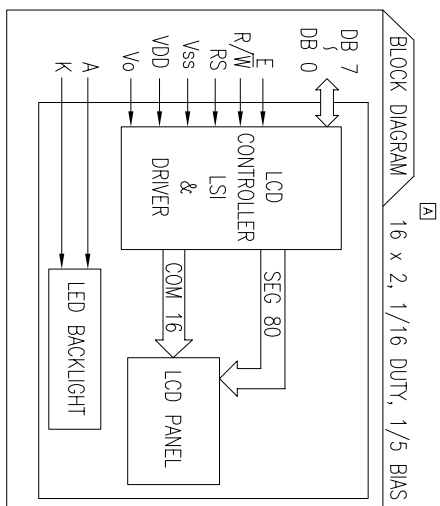
[A] VDD=4.7V to 5.3V, TA=25°C

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	VDD-Vss	-	5.0	-	-	V
SUPPLY CURRENT FOR LOGIC	IDD	VDD=5V	2.2	2.0	3.0	mA
INPUT VOLTAGE	VH	-	2.2	-	4.7	V
			VL	0	-	0.6
OUTPUT VOLTAGE	VOH	-	2.4	-	-	V
			VOL	-	-	0.4
VOLTAGE	VF	If=220mA	-	4.2	4.6	V
			IF	-	220	480
*LED BACKLIGHT	POWER CONSUMPTION	PD	-	924	-	mW
			LUMINOUS COLOR	L	If=220mA	70
			-	-	-	mm

*ONLY APPLIES TO MODULES WITH BACKLIGHT



VDD-Vo: LCD DRIVING VOLTAGE
VR: 10KΩ-20KΩ



[A] BLOCK DIAGRAM 16 x 2, 1/16 DUTY, 1/5 BIAS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT	
			MIN	MAX		
SUPPLY VOLTAGE FOR LOGIC	VDD-Vss	Tg=25°C	4.7	5.3	V	
SUPPLY VOLTAGE FOR LCD DRIVE	VDD-Vo	-	4.2V@50°C	4.8@0°C	V	
INPUT VOLTAGE	Vr	Tg=25°C	Vss	VDD	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

ABSOLUTE MAXIMUM RATINGS

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