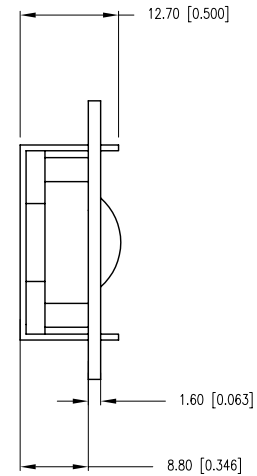
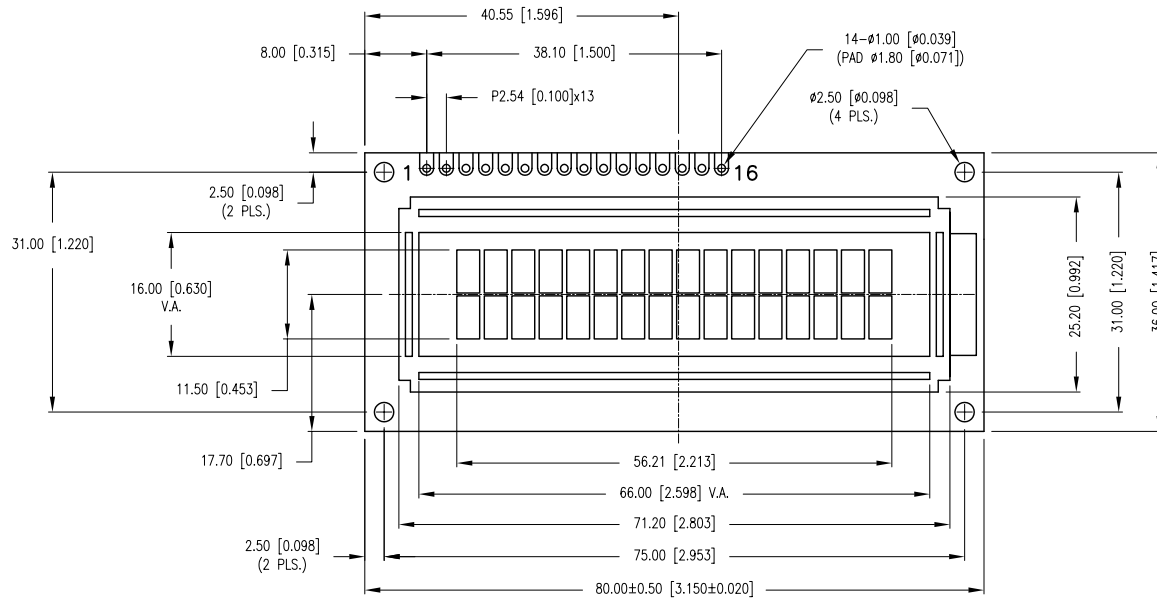
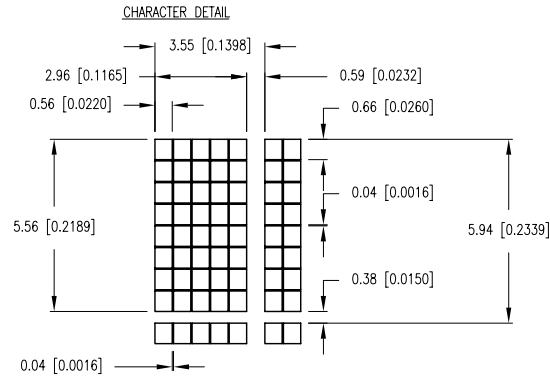


PART NUMBER	LCM-H01602DWF/A-P	REV.	B
DATE	E.C.N. NUMBER AND REVISION COMMENTS		REV.
02.13.07	E.C.N. #11148.		A
10.13.11	E.C.N. #10BRDR.		B

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.= <sup>+DECIMAL PRECISION</sup> -0.00 <sub>-DECIMAL PRECISION</sub>

**LUMEX**  
Creating LED and LCD Solutions Together™

290 E. HELEN ROAD  
PALATINE, IL 60067-6976  
PHONE: +1.847.359.2790  
FAX: +1.847.359.6538  
WEB: WWW.LUMEX.COM

5.56mm CHAR HEIGHT, 5x8 DOT MATRIX, FSTN, TRANSLFLECTIVE, GREEN LED BKLTL, 16x2 LCD MODULE.

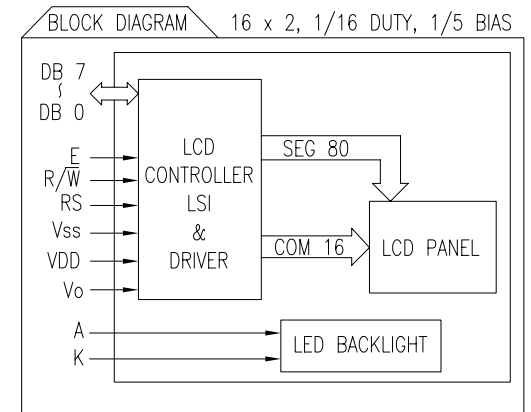
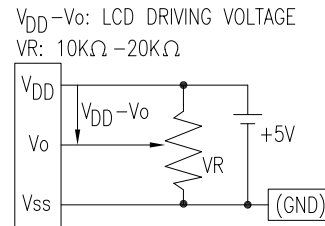
\*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*

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.

DATE:	10.13.11	DRAWN BY:	AB
PAGE:	1 OF 2	CHKD BY:	JD
SCALE:	NTS	APRVD BY:	SS
UNIT:	mm [INCH]		Ⓟ

PART NUMBER	LCM-H01602DWF/A-P	REV.	B
DATE	E.C.N. NUMBER AND REVISION COMMENTS		REV.
02.13.07	E.C.N. #11148.		A
10.13.11	E.C.N. #10BRDR.		B

PIN CONFIGURATION			
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>SS</sub>	-	POWER SUPPLY GND (0V)
2	V <sub>DD</sub>	-	
3	V <sub>O</sub>	-	
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



ELECTRICAL CHARACTERISTICS		V <sub>DD</sub> =4.7V to 5.3V, T <sub>A</sub> =25°C					
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	-	-	5.0	-	V	
SUPPLY CURRENT FOR LOGIC	I <sub>DD</sub>	V <sub>DD</sub> =5V	-	2.0	3.0	mA	
INPUT VOLTAGE	HIGH	V <sub>IH</sub>	2.2	-	V <sub>DD</sub>	V	
	LOW	V <sub>IL</sub>	0	-	0.6	V	
OUTPUT VOLTAGE	HIGH	V <sub>OH</sub>	2.4	-	-	V	
	LOW	V <sub>OL</sub>	-	-	0.4	V	
*LED BACKLIGHT	VOLTAGE	V <sub>f</sub>	3.3	3.4	3.5	V	
	CURRENT	I <sub>f</sub>	10	20	25	mA	
	POWER CONSUMPTION	PD	-	53	-	mW	
	LUMINOUS	L	I <sub>f</sub> =20mA	70	-	-	cd/m <sup>2</sup>
	COLOR	-	GREEN	-	525	-	nm

\*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V <sub>DD</sub> -V <sub>O</sub>	-	4.2@50°C	4.8@0°C	V
INPUT VOLTAGE	V <sub>I</sub>	T <sub>a</sub> =25°C	V <sub>SS</sub>	V <sub>DD</sub>	V
OPERATING TEMPERATURE	T <sub>opr</sub>	LCM-H	-20	70	°C
STORAGE TEMPERATURE	T <sub>stg</sub>	LCM-H	-30	80	°C

\*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.= +<sup>DECIMAL</sup> PRECISION MAX.= +<sup>0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION UNCONTROLLED DOCUMENT

	290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 FAX: +1.847.359.6538 WEB: WWW.LUMEX.COM	5.56mm CHAR HEIGHT, 5x8 DOT MATRIX, FSTN, TRANSLFLECTIVE, GREEN LED BKL, 16x2 LCD MODULE.	DATE: 10.13.11	DRAWN BY: AB	
	**THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.**		PAGE: 2 OF 2	CHKD BY: JD	
	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.		SCALE: NTS	APRVD BY: SS	
			UNIT: mm [INCH]	(Pb)	