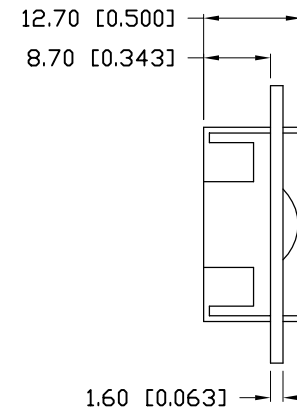
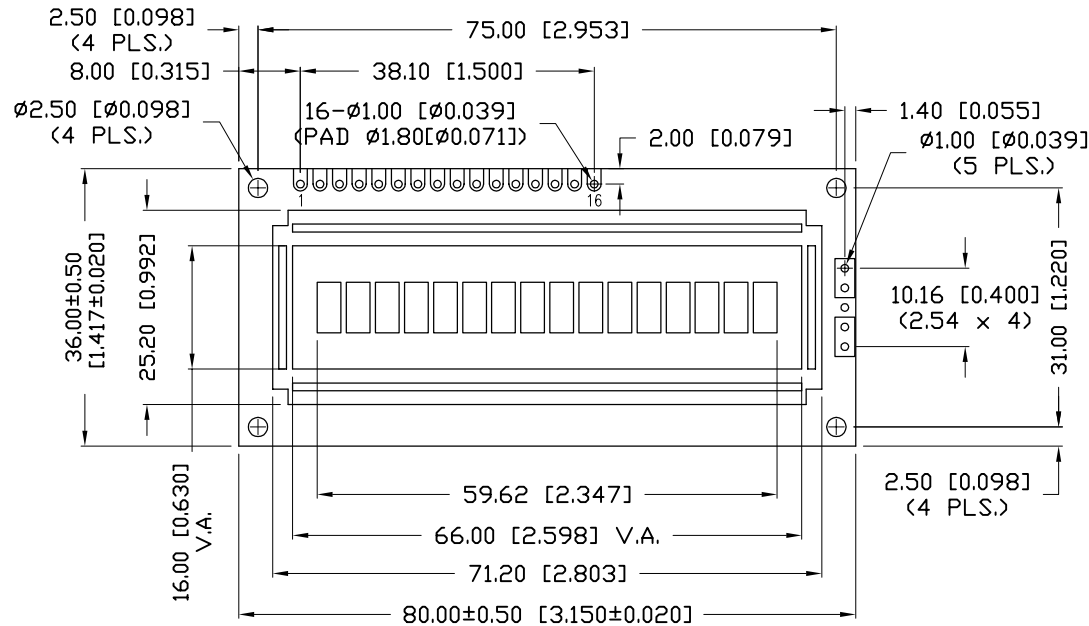
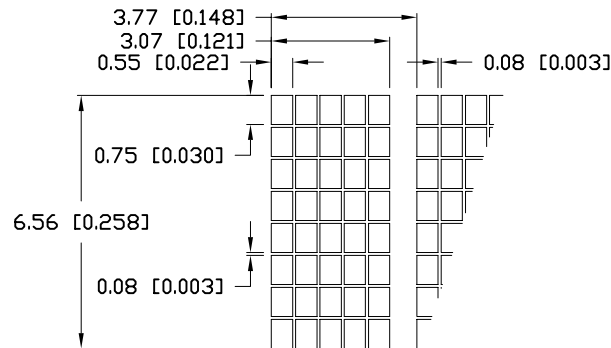


CHARACTER DETAIL

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.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION

UNCONTROLLED DOCUMENT

REV.	PART NUMBER LCM-S01601DSF
------	------------------------------

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.



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

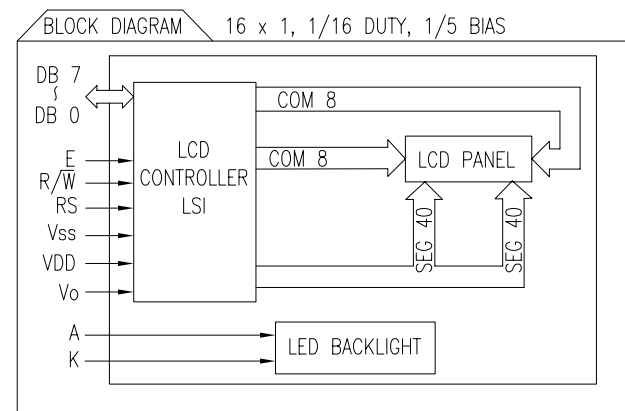
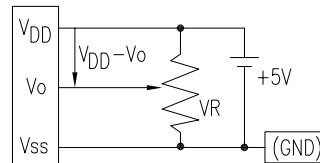
6.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
16 x 1 LCD MODULE, 1/16 DUTY, 1/5 BIAS.
STN, TRANSFLECTIVE, WITH LED BACKLIGHT

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: GB	CHECKED BY: JD	APPROVED BY: JD	DATE: 5.2.02 PAGE: 1 OF 2 SCALE: N/A
-----------------	-------------------	--------------------	--

PIN CONFIGURATION						
PIN NO.	SYMBOL	LEVEL	FUNCTION			
1	V _{SS}	-	POWER SUPPLY	GND (0V)		
2	V _{DD}	-		5V		
3	V _O	-		FOR LCD DRIVE		
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: 10KΩ-20KΩ



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	-	1.6	2.5	mA
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD} 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 =150mA	-	4.2	4.6 V
	CURRENT	I _f	-	-	150	200 mA
	POWER CONSUMPTION	PD	-	-	630	- mW
	LUMINOUS	L	I _f =150mA	70	-	- cd/m ²
	COLOR	-	-	-	-	-

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	
STORAGE TEMPERATURE	T _{stg}	LCM-S	-20	70	°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.=+DECIMAL PRECISION -0.00

REV.	PART NUMBER LCM-S01601DSF
6.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 16 x 1 LCD MODULE, 1/16 DUTY, 1/5 BIAS. STN, TRANSFLECTIVE, WITH LED BACKLIGHT	

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.

	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: GB	CHECKED BY: JD	APPROVED BY: JD