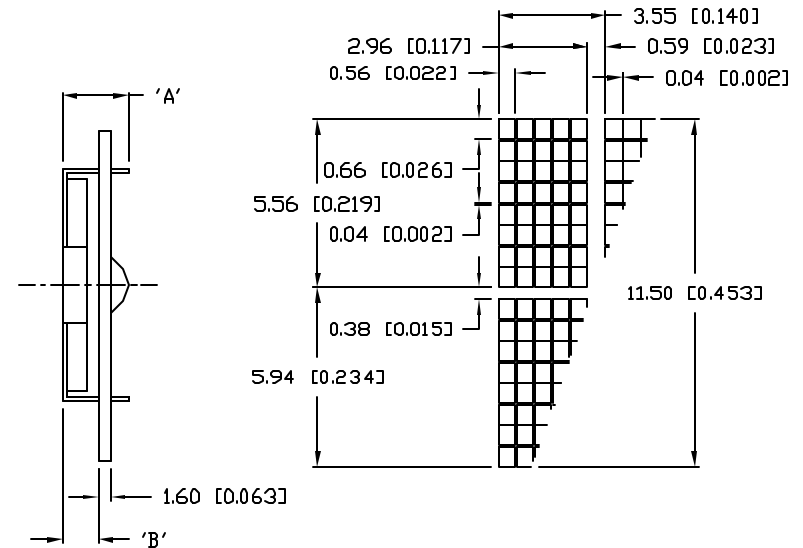
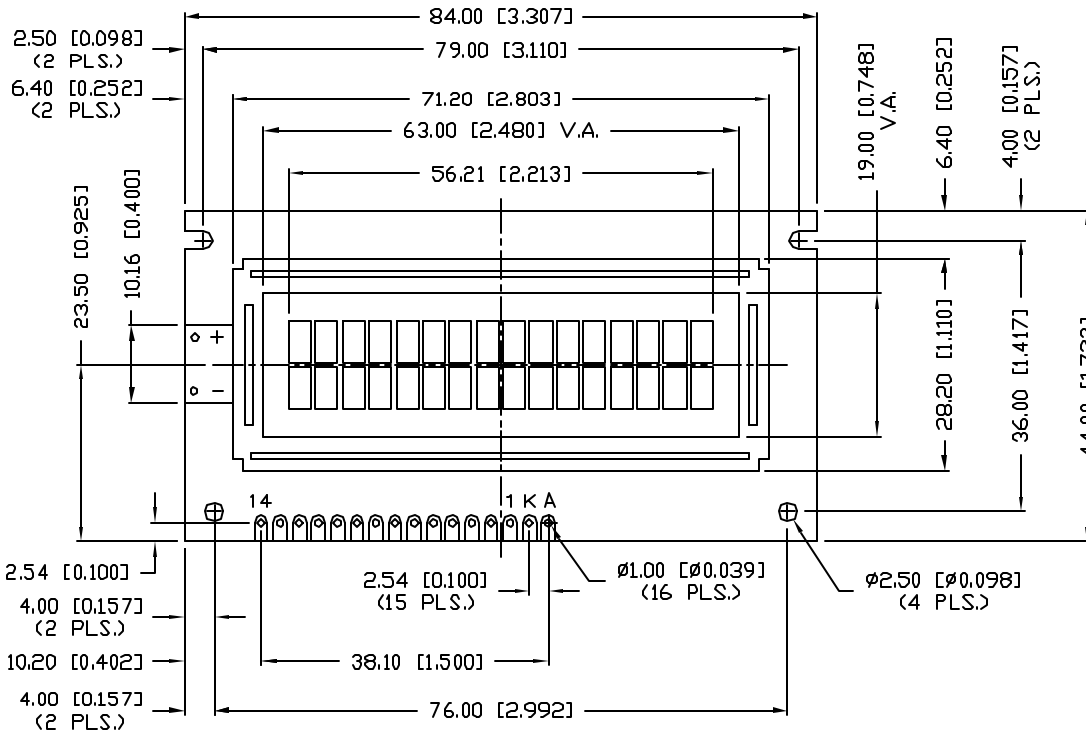


UNCONTROLLED DOCUMENT

PART NUMBER		REV.
LCM-X01602DXX/G		
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE

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)

TYPE	DIM.	A	B
WITH BACKLIGHT		12.0	8.1
NO BACKLIGHT		8.1	4.1



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

UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED TOLERANCE IS ±0.25mm (±0.010")

REV.	PART NUMBER
	LCM-X01602DXX/G
5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 16 x 2 LCD CHARACTER MODULE, 1/16 DUTY, 1/5 BIAS.	

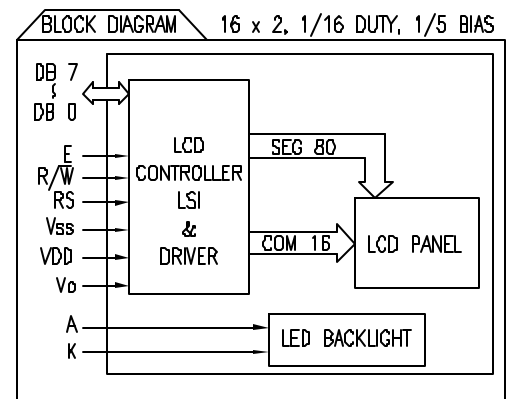
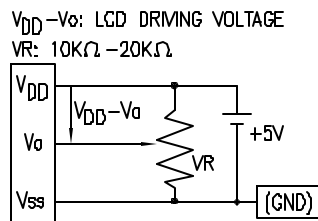
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RELIABILITY NOTE
OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

290 E. HELLEN ROAD
PALATINE, ILLINOIS 60067
PHONE: 1-847-359-2790
WEB: HTTP://WWW.LUMEX.COM

DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE: 10-21-98
SA/BC			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.			
A	A	-	ANODE	LED BACKLIGHT		
K	K	-	CATHODE	LED BACKLIGHT		



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	-	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	V _f	I _f =220mA	-	4.2	4.6	V
	CURRENT	I _f	-	-	220	-	mA
	POWER CONSUMPTION	PD	-	-	925	-	mW
	LUMINOUS	L	I _f =220mA	70	-	-	cd/m ²
	COLOR	-	-	-	-	-	nm

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	

*ONLY APPLIES TO MODULES WITH BACKLIGHT

*UNLESS OTHERWISE SPECIFIED TOLERANCE IS ±0.25mm (±0.010")

REV.	PART NUMBER LCM-X01602DXX/G	<p>CONFIDENTIAL INFORMATION</p> <p>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.</p> <p>RELIABILITY NOTE</p> <p>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.</p>	<p>LUMEX INCORPORATED</p> <p>290 E. HELLEN ROAD PALATINE, ILLINOIS 60067 PHONE: 1-847-359-2790 WEB: HTTP://WWW.LUMEX.COM</p>
5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 16 x 2 LCD CHARACTER MODULE, 1/16 DUTY, 1/5 BIAS.		DRAWN BY: SA/BC	CHECKED BY: APPROVED BY: DATE: 10-21-98 PAGE: 2 OF 2 SCALE: N/A