## UNCONTROLLED DOCUMENT

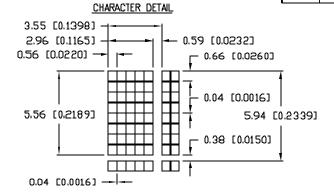
PART	NUMBER
LCM-X01	602DXX/B

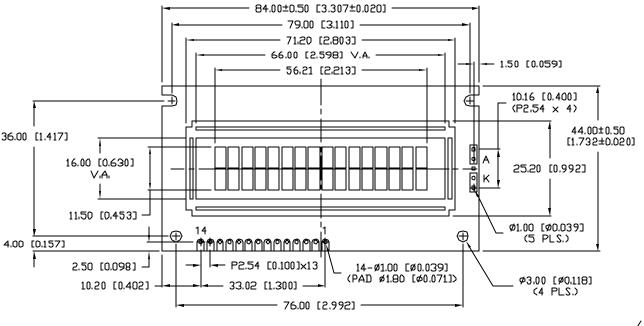
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
Α	F.C.N. #10BRDR. & REDRAWN.	9-3-98

REV.

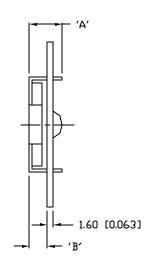
P/N PREFIX/SUFFIX TABLE						
LCM-X DX>			DESCRIPTION			
STANDARD S		SR	STN, REFLECTIVE			
		SF	STN, TRANSFLECTIVE(W/ BACKLIGHT)			
HIGH TEMP. H		TR	TN, REFLECTIVE			
I LIGHT IEME.	П	TF	TN, TRANSFLECTIVE(W/ BACKLIGHT)			

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





TYPE	DIM.	Α	В
WITH BAC	CKLIGHT	12.7	8.7
NO BACK	CLICHT	8.8	4.8



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

REV. PART NUMBER LCM-X01602DXX/B

> 5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS.

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 DUR 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. INCORPORATED

SA/BC

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

DRAWN BY:

CHECKED BY: APPROVED BY: DATE: 4-28-98 PAGE: 1 OF 2

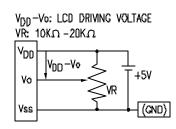
SCALE: N/A

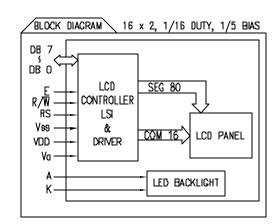
### UNCONTROLLED DOCUMENT

	PART NUMBER		REV.
	LCM-X01602DXX/B		А
REV.	E.C.N. NUMBER AND REVISION COMMENTS	D/	ATE
	SEE PAGE #1./		

_	PIN	CONFIGURATIO		
INI	Νn	SAMBOL	I F\	

PIN NO.	SAMBOL	LEVEL	FUNCTION					
1	Vss	-	GND (OV)	GND (OV)				
2	$v_{\mathrm{DD}}$	1	POWER SUPPLY 5V					
3	Vo	1		FOR LCD DRIVE				
			REGISTER SELECT SIG	NAL				
4	RS	H/L	H: DATA INPUT					
			: INSTRUCTION INPUT					
5	R∕W	u /ı	H; DATA READ (MODULE>MPU)					
'	10/ ₩	H/L	L. DATA WRITE (MODULE <mpu)< td=""></mpu)<>					
6	E	H,H->L	ENABLE					
7~14	DB0~DB7	H/L	DATA BUS-SOFTWARE SELECTABLE 4 OR 8 BIT MODE.					





ELECTRICAL CHARACTERISTICS  $V_{DD}$ =4.7V & 5.3V,  $T_A$ =25°C

		טט							
І пем		SYMBOL	CONDITION	STANDARD VALUE			UNIT		
IILM				CONDITION	MIN.	TYP.	MAX.	LINI	
SUPPLY VC	LTAGE FOR	LOGIC	$V_{\mathrm{DD}}$ – $V_{\mathrm{SS}}$	_	_	5.0	_	٧	
SUPPLY CL	IRRENT FOR	LOGIC	DD	V <sub>DD</sub> =5V	_	2.0	3.0	mΑ	
		HIGH	٧H	-	2.2	-	VDD.	٧	
INPUT VOLT	TAGE	LOW	$v_{IL}$	-	0	-	0.6	٧	
HIGH		Voн	-	2.4	-	-	٧		
OUTPUT VO	LTAGE	LOW	V <sub>Ω</sub> L	=	1	1	0.4	٧	
	VOLTAGE		Vf	lf=160mA	1	4.2	4.6	٧	
*LED	CURRENT POWER CUNSUMPTION		If	_	1	160	-	mA	
BACKLIGHT			PD	_	_	656	_	mW	
	LUMINOUS		L	lf=160mA	70	-	-	cd/m <sup>2</sup>	
	COLOR		_	_	_	_	_	ım	

\*ONLY APPLIES TO MODULES WITH BACKLIGHT

#### $^{\prime}$ ABSOLUTE MAXIMUM RATINGS $^{ackslash}$

/	\					
ПЕМ	SYMBOL	TEST	STANDARD VALU		UNIT	
TIEW .	JINIDOL	CONDITION	MIN	MAX	ONII	
SUPPLY VOLTAGE FOR LOGIC	VDD-Vss	Ta=25°C	4.7	5.3	>	
SUPPLY VOLTAGE FOR LCD DRIVE	VDD-Vo	-	4.2 <b>@</b> 50°€	4.8@0°C	>	
INPUT VOLTAGE	٧١	Ta=25°C	Vss	∨ <sup>DD</sup>	٧	
OPERATING TEMPERATURE	Topr	LCM-S	0	50	ċ	
OPERATING TEMPERATURE	торі	LCM-H	-20	70	့	
STORAGE TEMPERATURE	Tota	LCM-S	-20	70	့	
STORAGE TEMPERATURE	Tstg	LCM-H	-30	<b>8</b> 5	.C	

## UNCONTROLLED DOCUMENT

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

A LCM-X01602DXX/B

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS. CONFDENTIAL NFORMATION

THE NFORMATION CONTINUED 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
CONTINUED HEREN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR
IN PART FROM DISCUSSURE AND DISSEMINATION TO ALL THIRD PARTIES.

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

LUMEX INCORPORATED

SA/BC

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

SCALE: N/A

DRAWN BY: CHECKED BY: APPROVED BY: DATE: 4-28-98
PAGE: 2 OF 2

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Lumex:

LCM-S01602DSF/B