



We Tame Photons to Work for You!



Products

Search Tools

Solutions

Literature

Tech Notes

Support

Corporate

Search:

For:



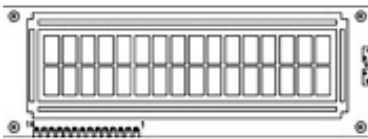
Products > LCD'S > Character Modules > 16 x 2 > 122mm x 44mm

Features / Options

- ▶ Reliable User-interface Display
- ▶ Low Power Consumption
- ▶ Very Long Operational Life
- ▶ Low Cost Power and Signal Interference
- ▶ Customization and Flexibility
- ▶ Affordable Tooling Costs

Applications / Uses

- ▶ Audio Equipment (Home/Office)
- ▶ Consumer Items (Watches, Calculators, Radio, Toys)
- ▶ Automotive Dash Panels
- ▶ Medical Equipment
- ▶ Security Electronics
- ▶ Military Control Panels
- ▶ Testing Equipment

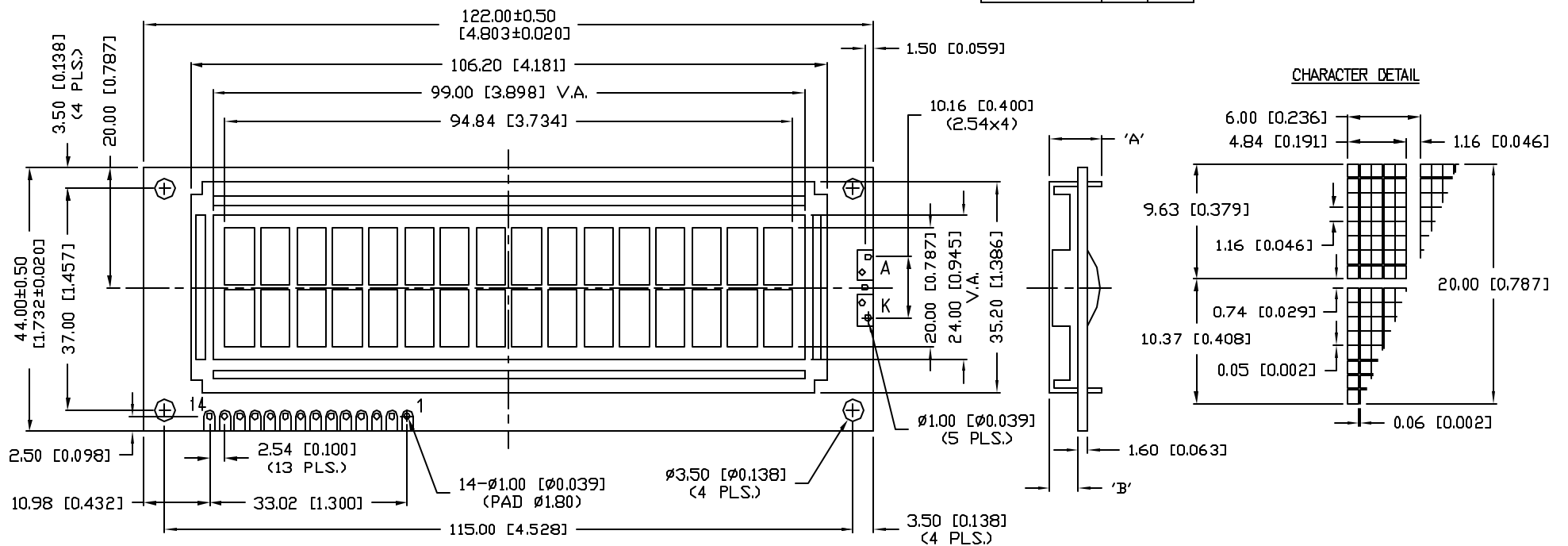


Part Number:		Overall Size (L x W x H)	Viewing Area (W x H)	Character Height (W x H)	Duty		
LCM-S01602DSF/D		122x44x13	99x24	4.84x9.63	1/16		
LCM-S01602DSR/D			99x24	4.84x9.63	1/16		
LCM-S01602DTF/D		122x44x13	99x24	4.84x9.63	1/16		
LCM-S01602DTR/D			99x24	4.84x9.63	1/16		

PART NUMBER		REV.
LCM-X01602DXX/D		A
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10464./	10-9-98

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

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



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

REV.	PART NUMBER
A	LCM-X01602DXX/D

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

9.63mm CHARACTER HEIGHT, 16 x 2 CHARACTERS,
 5 x 8 DOT MATRIX LCD MODULE,
 1/16 DUTY, 1/5 BIAS.

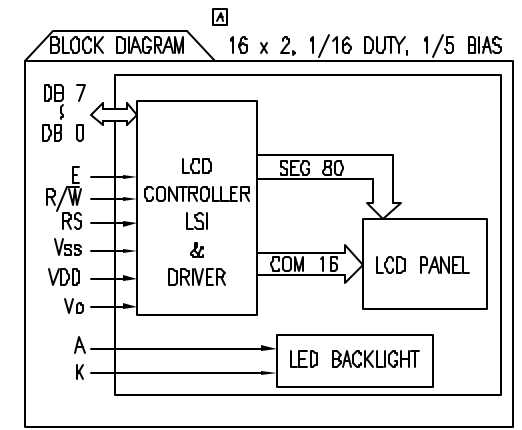
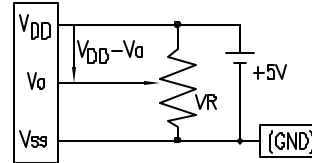
RELIABILITY NOTE
 OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE: 8-14-98
SA/BC			PAGE: 1 OF 2
			SCALE: N/A

PART NUMBER		REV.
LCM-X01602DXX/D		A
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
	SEE PAGE #1./	

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	-	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	480	mA
	POWER CONSUMPTION	P _D	-	-	924	-	mW
	LUMINOUS	L	I _f =220mA	70	-	-	cd/m ²
	COLOR	-	-	-	-	-	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

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	-	4.2V@50°C	4.8V@0°C	V
INPUT VOLTAGE	V _r	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	Topr	LGM-S	0	50	°C
		LGM-H	-20	70	°C
STORAGE TEMPERATURE	Tstg	LGM-S	-20	70	°C
		LGM-H	-30	85	°C

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

REV.	PART NUMBER
A	LCM-X01602DXX/D
9.63mm CHARACTER HEIGHT, 16 x 2 CHARACTERS, 5 x 8 DOT MATRIX 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
 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.

LUMEX INCORPORATED		290 E. HELLEN ROAD PALATINE, ILLINOIS 60067 PHONE: 1-847-359-2790 WEB: HTTP://WWW.LUMEX.COM	
DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE: 8-14-98
			PAGE: 2 OF 2
			SCALE: N/A