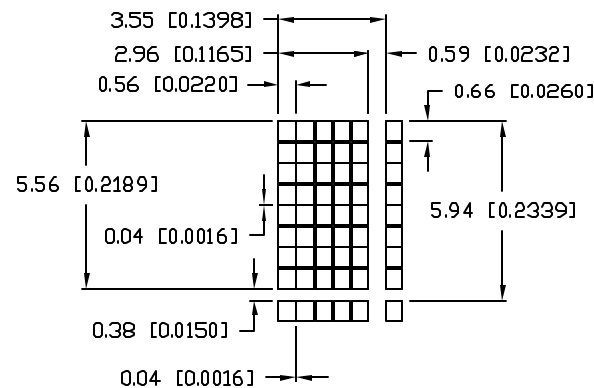


P/N PREFIX/SUFFIX TABLE

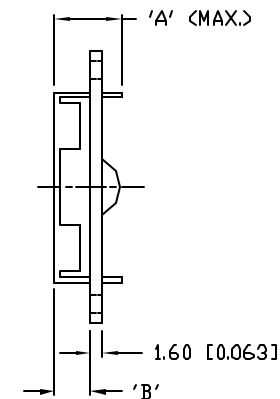
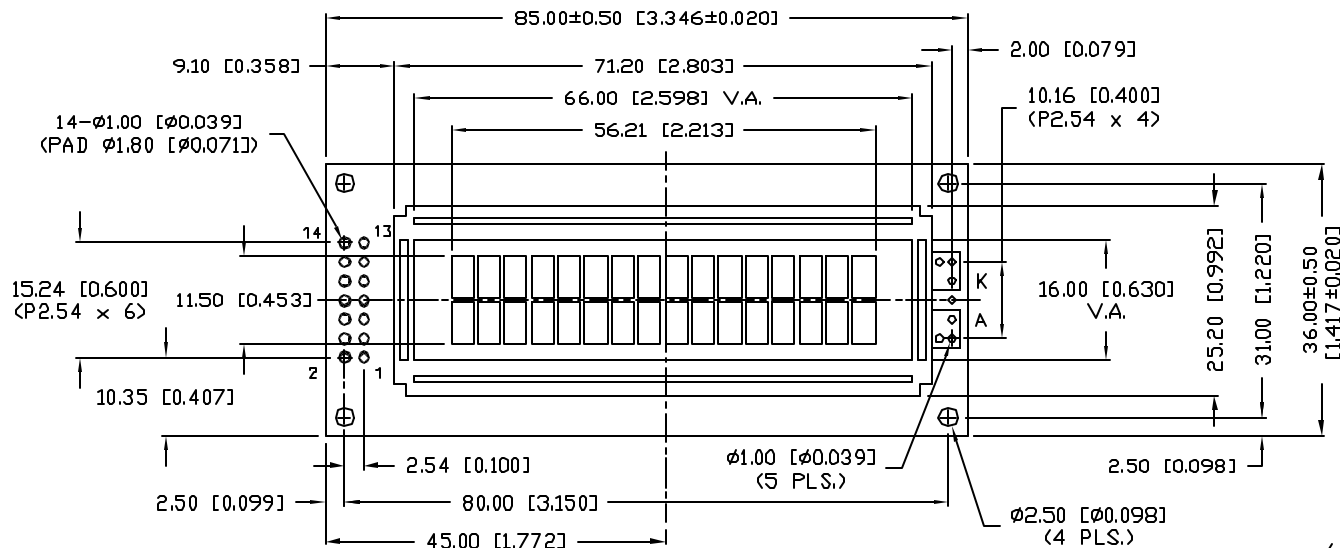
LCM-X	DX/1J-Y	DESCRIPTION
STANDARD	S	SR/1J-Y
	SF/1J-Y	STN-YELLOW, TRANSFLECTIVE (W/ BACKLIGHT)
HIGH TEMP	H	TR/1J-Y
	TF/1J-Y	TN-YELLOW, TRANSFLECTIVE (W/ BACKLIGHT)

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

CHARACTER DETAIL



TYPE	DIM.	A	B
WITH BACKLIGHT		12.7	9.0
NO BACKLIGHT		8.8	4.8



UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED TOLERANCE IS $\pm 0.25\text{mm}$ ($\pm 0.010''$)

REV.

PART NUMBER

LCM-X01602DXX/1J-Y

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
16 x 2 LCD MODULE, BACKLIGHT WITH REVERSED POLARITY,
YELLOW BACKGROUND, 1/16 DUTY, 1/5 BIAS.

CONFIDENTIAL INFORMATION

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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.

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:

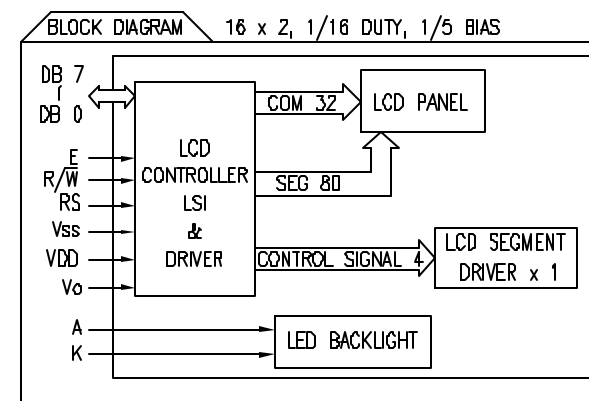
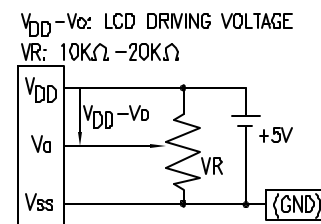
DATE: 9-2-98

PAGE: 1 OF 2

SCALE: N/A

SA/BC

PIN CONFIGURATION			
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	-	POWER SUPPLY GND (0V) 5V FOR LCD DRIVE
2	V _{DD}	-	
3	V _a	-	
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 ₁ H->L	ENABLE
7~14	DB0~DB7	H/L	DATA BUS-SOFTWARE SELECTABLE 4 OR 8 BIT MODE.



ELECTRICAL CHARACTERISTICS		V _{DD} =4.7V to 5.3V, T _A =25°C		STANDARD VALUE			UNIT	APPLICABLE TERMINAL
ITEM	SYMBOL	CONDITION		MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	-	5.0	-	-	V	V _{DD}
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0	-	mA	V _{DD}
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	4.7	V	RS,R/W,E
	LOW	V _{IL}	-	0	-	0.6	V	DB0~DB7
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-0.205mA	2.4	-	-	V	DB0~DB7
	LOW	V _{OL}	I _{OL} =1.6ma	-	-	0.4	V	RS,R/W,E
*LED BACKLIGHT	VOLTAGE	V _f	I _f =160mA	-	4.2	4.5	V	-
	CURRENT	I _f	-	-	160	400	mA	-
	POWER CONSUMPTION	P _D	-	-	660	-	mW	-
	LUMINOUS	L	I _f =160mA	70	-	-	cd/m ²	-
	COLOR	-	-	-	-	-	nm	-

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS		TEST CONDITION		STANDARD VALUE		UNIT
ITEM	SYMBOL			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 _a	-		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
		LCM-S		-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H		-30	85	°C

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

REV.	PART NUMBER	CONFIDENTIAL INFORMATION		LUMEX INCORPORATED		290 E. HELLEN ROAD PALATINE, ILLINOIS 60067 PHONE: 1-847-359-2790 WEB: HTTP://WWW.LUMEX.COM	
	LCM-X01602DXX/1J-Y	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.		DRAWN BY:		DATE: 9-2-98	
5.56mm CHARACTER HIEGHT, 5 x 8 DOT MATRIX, 16 x 2 LCD MODULE, BACKLIGHT WITH REVERSED POLARITY, YELLOW BACKGROUND, 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.		CHECKED BY:		PAGE: 2 OF 2	
		SA/BC		APPROVED BY:		SCALE: N/A	