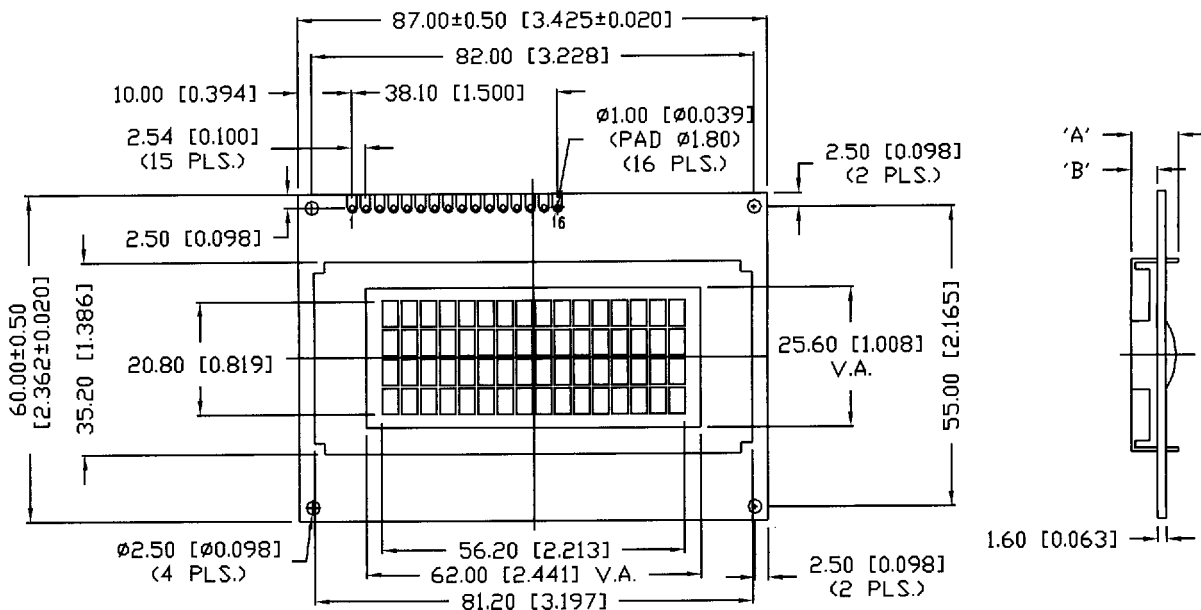


## LCM-X01604DXX

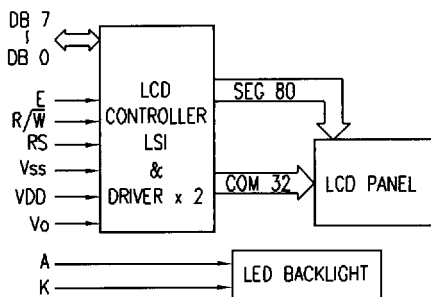
16 x 4

P/N PREFIX/SUFFIX TABLE		
LCM-X	DXX	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		12.7	8.8
NO BACKLIGHT		8.9	4.8



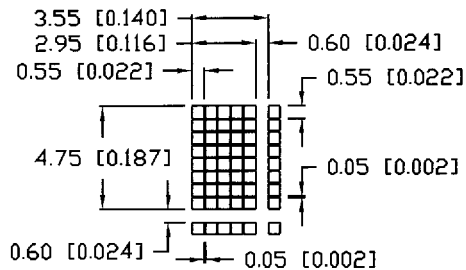
### BLOCK DIAGRAM



### PIN CONFIGURATION

PIN NO.	1	2	3	4	5
SYMBOL	V <sub>SS</sub>	V <sub>DD</sub>	V <sub>O</sub>	RS	R/W
PIN NO.	6	7~14	15	16	
SYMBOL	E	DB0~DB7	A	K	

### CHARACTER DETAIL



# character modules

## ELECTRICAL CHARACTERISTICS (V<sub>DD</sub>=4.7V to 5.3V, T<sub>a</sub>=25°C)

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Supply Voltage for Logic	V <sub>DD</sub> - V <sub>SS</sub>	-	-	5.0	-	V
Supply Current for Logic	I <sub>DD</sub>	V <sub>DD</sub> = 5V	-	2.0	3.0	mA
Input Voltage	High	V <sub>IH</sub>	2.2	-	4.7	V
	Low	V <sub>IL</sub>	0	-	0.6	V
Output Voltage	High	V <sub>OH</sub>	2.4	-	-	V
	Low	V <sub>OL</sub>	-	-	0.4	V

## ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN.	MAX.	
Supply Voltage for Logic	V <sub>DD</sub> - V <sub>SS</sub>	T <sub>a</sub> = 25°C	4.7	5.3	V
Supply Voltage for LCD Drive	V <sub>DD</sub> - V <sub>O</sub>	-	4.2 @ 50°C	4.8 @ 0°C	V
Input Voltage	V <sub>I</sub>	T <sub>a</sub> = 25°C	V <sub>SS</sub>	V <sub>DD</sub>	V
Operating Temperature	T <sub>opr</sub>	LCM-S	0	50	°C
		LCM-H	-20	70	°C
Storage Temperature	T <sub>stg</sub>	LCM-S	-20	70	°C
		LCM-H	-30	85	°C

## MECHANICAL SPECIFICATIONS

PARAMETER	DIMENSIONS (mm)
Overall Size of Module	87.00 x 60.00 x 8.90
Overall Size with Led Backlight	87.00 x 60.00 x 12.70
Viewing Area	62.00 x 25.60
Character Size	2.95 x 4.75
Pixel Size	0.55 x 0.55

## FEATURES

PART NUMBER	LCD MODE	BACKLIGHT
LCM-X01604DSR	STN REFLECTIVE	NONE
LCM-X01604DSF	STN TRANSFLECTIVE	LED
LCM-X01604DTR	TN REFLECTIVE	NONE
LCM-X01604DTF	TN TRANSFLECTIVE	LED

X = S (standard), or H (high)