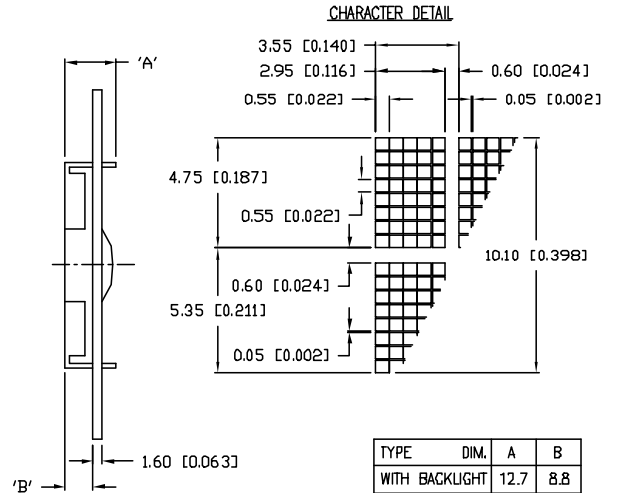
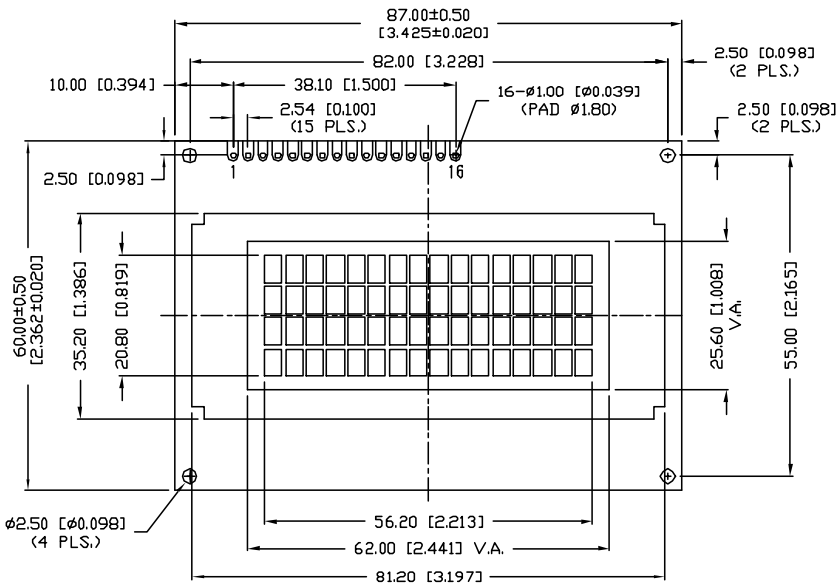


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PART NUMBER LCM-X01604DXX		REV. A
REV. A	E.C.N. NUMBER AND REVISION COMMENTS E.C.N. #10464./	DATE 10-9-98

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
		TF TN, TRANSFLECTIVE(W/ BACKLIGHT)



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

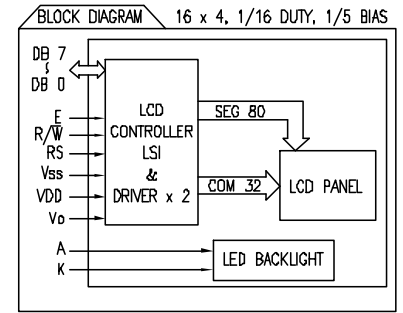
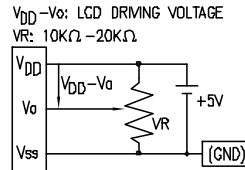
UNCONTROLLED DOCUMENT
 *UNLESS OTHERWISE SPECIFIED TOLERANCE IS ±0.25mm (±0.010")

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4.75mm TALL, 5 x 8 DOT MATRIX, 16 x 4 CHARACTER LCD MODULE, 1/16 DUTY, 1/5 BIAS.		DRAWN BY: SA/BC CHECKED BY: APPROVED BY: DATE: 8-10-98 PAGE: 1 OF 2 SCALE: N/A	

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PART NUMBER LCM-X01604DXX		REV. 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) 5V FOR LCD DRIVE
2	V _{DD}	-	
3	V ₀	-	
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



ELECTRICAL CHARACTERISTICS		① 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 =260mA	-	4.2	4.5	V
	CURRENT	I _f	-	-	260	400	mA
	POWER CONSUMPTION	PD	-	-	1.092	-	mW
	LUMINOUS	L	I _f =260mA	70	-	-	cd/m ²
	COLOR	-	-	-	-	-	nm

ABSOLUTE MAXIMUM RATINGS		②				
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 ₀	-	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	

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