

PART NUMBER
LCM-X01604DXX

REV.

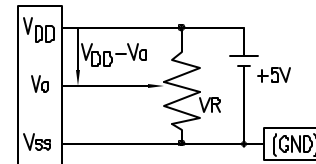
REV. E.C.N. NUMBER AND REVISION COMMENTS
SEE PAGE #1./

DATE

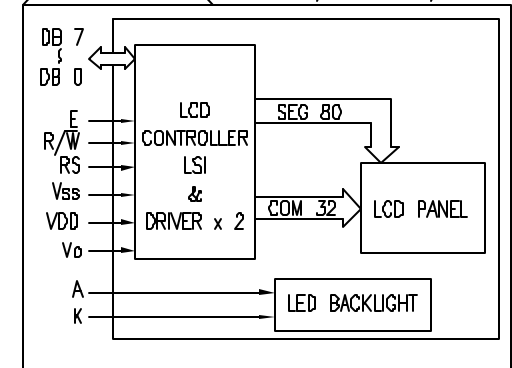
PIN CONFIGURATION

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



BLOCK DIAGRAM 16 x 4, 1/16 DUTY, 1/5 BIAS



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 =260mA	-	4.2	4.5	V
	CURRENT	I _f	-	-	260	400	mA
	POWER CONSUMPTION	P _D	-	-	1092	-	mW
	LUMINOUS	L	I _f =260mA	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	-	4.2@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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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.

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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: CHECKED BY: APPROVED BY: DATE: 8-10-98

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SCALE: N/A

SA/BC